



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : YOSHIMURA, et al.
 Appl. No. : 10/523,120
 Filing Date : January 24, 2005
 For : STATION
 Examiner : Unknown
 Group Art Unit : 2661

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

August 25, 2006
 (Date)

Kirk Hahn

Kirk Hahn, Reg. No. 51,763

RENEWED PETITION UNDER 37 C.F.R. § 1.137(b)

Commissioner for Patents
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Sir:

The above-identified application became abandoned for failure to pay the Filing Fee from a notice of action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for the payment of the Basic Filing Fee, which was September 17, 2005.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995, and for all design applications; and
- (4) Statement that the entire delay was unintentional.

(1) Petition Fee:

Petition fee under 37 C.F.R. § 1.17(m) in the amount of: \$1,500.00 was paid by EFS on May 3, 2006 [see attached EFS receipt – Exhibit I].

(2) Reply and/or fee:

The filing fee for a large entity National Phase application [Basic National Stage Fee -- \$300.00, National Stage Search Fee -- \$500.00, and National Stage Examination Fee -- 200.00] in the amount of \$1,000.00 was paid by EFS on May 3, 2006 [see attached EFS receipt – Exhibit I].

(3) Terminal Disclaimer:

Since this National Stage application was filed on or after June 8, 1995, no terminal disclaimer is required.

(4) Statement:

Applicants' representative states the entire delay in paying the required filing fee from the due date for the required fee until the filing of a grantable petition under 37 C.F.R. § 1.137(b) was unintentional.

Evidence in Support of Unintentional Delay

On January 24, 2005, Applicants filed by US Express Mail a National Phase Application with all documents necessary to receive a filing date (Exhibit A). Additionally, a Form PTO-2038 (Credit Card Payment Form) in the amount of \$1,000 was enclosed to pay the Filing Fees (Exhibit B). Approximately a week later the return postcard, enclosed with the application documents, was returned with an unofficial filing date and application number (Exhibit C). In due course, the application was listed in Private PAIR.

Applicant's representative checked Private PAIR on a routine basis to determine when changes occurred in the status of applications (Exhibit D – Hahn Declaration, paragraph 6). In early June 2005, the status of the above application changed to "Abandonment -- Inc. Application under Rule 53(b) - Filing Fee Paid" (Exhibit D – Hahn Declaration, paragraph 6). On June 18, 2005, a Notice of Abandonment was mailed to applicant indicating that the Filing Fee had not been paid due to credit card declination (Exhibit E).

On June 24, 2005, Applicant faxed a new Form PTO-2038 in the amount of \$1,000 with the correct credit card information (Exhibit F). The Filing Fee for this application was charged to the credit card account on June 24, 2005 (Exhibit G).

On July 28, 2005, the USPTO mailed a notice stating that the faxed letter had been considered a Petition to Revive, the Petition had been granted, and the application was no longer abandoned (Exhibit H). Applicant did not receive any further notices [e.g., Missing Parts, Notice of Abandonment] from the USPTO after this date (Exhibit D – Hahn Declaration, paragraph 13).

While checking Private PAIR in late April 2006, Applicant's representative noticed that the Bibliographic Data table listed the application's location as "FILE REPOSITORY (FRANCONIA)" rather than "ELECTRONIC" (Exhibit D – Hahn Declaration, paragraph 14). USPTO Customer Service was contacted and the application was retrieved from the repository (Exhibit D – Hahn Declaration, paragraph 14). It was determined that the application had been abandoned for failure to pay the Filing Fee.

Upon re-reading the Notice mailed on July 28, 2005, it was concluded that the notice had been misread (Exhibit D – Hahn Declaration, paragraph 15). The Filing Fee actually had not been paid, since the \$1,000 charge to the credit card account had been refunded due to the new Form PTO-2038 being submitted by fax. It had been ruled that the faxed Form PTO-2038 was the actual "payment of fees" rather than just correcting the credit card information submitted with the original application, as thought by applicant's representative (Exhibit H).

As soon as learning about the unpaid Filing Fee, a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 C.F.R. § 1.137(b) was filed by EFS with payment of \$1,500 for the petition fee and \$1,000 for the filing fee of a large entity National Phase application (Exhibit I and Exhibit D – Hahn Declaration, paragraph 16). This petition was dismissed without prejudice (Exhibit J). This current Renewed Petition under 37 C.F.R. § 1.137(b) is submitted to correct errors in the original Petition for Revival under 37 C.F.R. § 1.137(b).

Applicant's representative has attempted to pay the entire filing fees at every opportunity, but has been unsuccessful in submitting a Form PTO-2038 by the required means with the correct information. Although unsuccessful, the failure to pay the filing fees has been unintentional for the entire period from September 17, 2005 to the filing of a grantable petition under 37 C.F.R. § 1.137(b) (Exhibit D – Hahn Declaration, paragraph 18).

Thus, it is respectfully requested that this petition be granted on the foregoing grounds


Summary and Conclusion

All fees are believed to have already been paid on May 3, 2006 by the electronic payment system of EFS; however, a Form PTO-2038 is submitted and the Commissioner is hereby authorized to charge any additional fees that may be required, now or in the future, or credit any overpayment to my credit card.

Respectfully submitted,

Date:

August 25, 2006



Kirk Hahn

Agent of Record

Registration No. 51,763

Customer Number 038051

714-544-2934

Exhibit A

Copy of application “as filed”

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CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Attorney Docket No. : ASA-007

Applicant(s) : Takashi YOSHIMURA
Toshihisa TODE
Syozo TAMAKI

For : STATION

Agent : Kirk Hahn

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Mailing Label No. : EU 824597103 US

Date of Deposit : January 24, 2005

I hereby certify that the accompanying

Transmittal Letter (with preliminary amendment) in 3 pages; Specification in 32 pages; An English translation of claim amendments under PCT Article 19; A Declaration signed by the inventors in 3 pages; 4 Sheets of Drawings; Power of Attorney form and copy of assignment in 3 pages; Information Disclosure Statement and PTO-1449 in 1 total page (IDS and 1449); seven (7) references; PCT Forms: PCT/ISA/237, PCT/IB/308, PCT/ISA/210; International Application As Published (WO 2004/084570 A1); A credit card information sheet in the amount of \$1,000; and Return prepaid postcard

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


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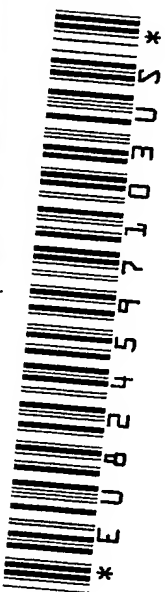
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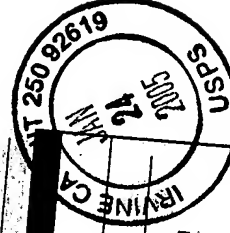
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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☐ Declaration Submitted with Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required).

Attorney Docket Number

First Named Inventor

Takashi YOSHIMURA

COMPLETE IF KNOWN

Application Number

Filing Date

Art Unit

Examiner Name

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As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

STATION

(Title of the invention)

the specification of which

☐ is attached hereto.

OR

☒ was filed on (MM/DD/YYYY)

03/04/2004

as United States Application Number or PCT International

Application Number

PCT/JP2004/002756

and was amended on (MM/DD/YYYY)

08/12/2004

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability, as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Copy Attached? | |
|--|---------|----------------------------------|--------------------------|--------------------------|-------------------------------------|
| Japanese Patent Application No. 2003-71391 | JAPAN | 03/17/2003 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
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☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR :



A petition has been filed for this unsigned inventor

Given Name

(first and middle [if any])

Takashi

Family Name
or Surname

YOSHIMURA

Inventor's
Signature

Date 02/04/2004

Residence: City

Minato-ku

State

Tokyo

Country

JAPAN

Citizenship

JAPAN

c/o Vodafone K.K., 5-1, Atago 2-chome, Minato-ku, Tokyo 105-6205 JAPAN

Mailing Address

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105-6205

Country

JAPAN

NAME OF SECOND INVENTOR:



A petition has been filed for this unsigned inventor


Given Name

(first and middle [if any])

Toshihisa

Family Name
or Surname

TODE

Inventor's
Signature

Date 02/04/2004

Residence: City

Minato-ku

State

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Country

JAPAN

Citizenship

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c/o Vodafone K.K., 5-1, Atago 2-chome, Minato-ku, Tokyo 105-6205 JAPAN

Mailing Address

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☒ Additional inventors are being named on the _____ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

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|--------------------|---|-------------|
| DECLARATION | ADDITIONAL INVENTOR(S) Supplemental Sheet | Page 3 of 3 |
|--------------------|---|-------------|

| | | | |
|--|-------------|---|-------------------|
| Name of Additional Joint Inventor, if any: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name Syozo (first and middle [if any]) | | Family Name TAMAKI or Surname | |
| Inventor's Signature  | | Date 02/06/2004 | |
| Residence: City Minato-ku | State Tokyo | Country JAPAN | Citizenship JAPAN |
| Mailing Address c/o Vodafone K.K., 5-1, Atago 2-chome, Minato-ku, Tokyo 105-6205 JAPAN | | | |
| City Minato-ku | State Tokyo | ZIP 105-6205 | Country JAPAN |
| Name of Additional Joint Inventor, if any: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle [if any]) | | Family Name or Surname | |
| Inventor's Signature | | Date | |
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| Mailing Address | | | |
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This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DESCRIPTION

STATION

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TECHNICAL FIELD

The present invention relates to congestion control of a station for receiving a message from an interconnected station on the input side and transmitting the message information relating to the received message to the interconnected station on the output side.

BACKGROUND ART

Recently developed cellular telephone systems can receive and transmit multimedia messages including static images, dynamic images, and music. Such multimedia messages can be transmitted and received via internet by cellular telephones adapted to multimedia messages and can be exchanged between the cellular telephones adapted to multimedia messages.

An example of the configuration of the multimedia message allocation system is shown in FIG. 5.

Referring to FIG. 5, a MMS (Multimedia Messaging Service) 1 forms a nucleus of a multimedia messaging service and controls storage, initiation of reception notification, and transfer of the received multimedia messages. The MMS 1 has a mailbox for each subscriber and holds multimedia messages. A PPG (Push Proxy

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Gateway) 2 is a device for conducting push transfer by which message information of multimedia messages from the MMS 1 or the like is transferred by initiating the network to the portable terminal 4 of a customer. A SMSC (Short Message Service Center) 3 conducts transmission and reception of short messages to and from the portable terminal 4. The portable terminal 4 is a cellular telephone adapted to multimedia messages. A WAP gateway (Wireless Application Protocol Gateway) 5 is a device for interconnecting the internet connection from the portable terminal 4.

The processing flow during allocation of multimedia messages will be explained below with reference to FIG. 5.

If the MMS 1 receives a multimedia message (MM-message), the MM-message is stored in the mailbox of the subscriber, which is the customer in the mailbox 1a, a reception notification (Notification) to the customer is produced, and transfer thereof is initiated. As a result, the MMS 1 requests a push transfer of reception notification to the PPG 2. The PPG 2 that received this request provides a session establishment request to the SMSC 3 so as to initiate the network. The SMSC 3 that received this request transfers to the portable terminal 4 a message that requests to establish a session to the PPG 2. In this case, the SMSC 3 sends the request to the portable terminal 4 as a short message.

COPY

The portable terminal 4 that received the request to establish a session to the PPG 2 establishes a session with respect to the PPG 2. As a result, a state of possible communication is established between the PPG 2 and portable terminal 4, and the PPG 2 sends a reception notification from the MMS 1 to the portable terminal 4. The portable terminal 4 that received the reception notification connects to the WAP gateway 5 and transfers to the WAP gateway 5 the notification response (NotifyResp) that came from the portable terminal 4 to the MMS 1. The WAP gateway 5 that receives the notification response sends the transferred notification response to the MMS 1.

The portable terminal 4 then transfers to the WAP gateway 5 a HTTP request (HTTP GET) to acquire a multimedia message from the MMS 1 with a HTTP (Hypertext Transfer Protocol) which is a simple protocol composed of a request and a response corresponding thereto. The WAP gateway 5 received it sends the transferred HTTP request (HTTP GET) to the MMS 1. The MMS 1 receives the HTTP request (HTTP GET) 1, reads the multimedia message stored in the mailbox of the portable terminal and sends it via the WAP gateway 5 to the portable terminal 4. As a result, the portable terminal 4 can receive the multimedia message for which the notification has been received.

In the PPG 2, the communication with the SMSC 3 is conducted with the communication protocol called SMPP (Short Message Peer-

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to-Peer), but flow control in the SMPP is not clearly defined and this protocol is considered to be unable to prevent or eliminate the appearance of congestion autonomously as a processing system. The resultant problem is that there is a risk of processing being interrupted or terminated in the SMSC 3 or PPG 2 when congestion has occurred in the SMSC 3 or PPG 2. Flow control support was also considered, but in order to produce the SMSC or PPG supporting the flow control, all the existing devices of those types had to be replaced which was unrealistic from the standpoint of cost.

Accordingly, it is an object of the present invention to provide a station such that even if congestion occurs in a station in which congestion cannot be prevented from occurring or eliminated autonomously, the occurred congestion can be eliminated without additional modifications.

DISCLOSURE OF THE INVENTION

In order to attain the above-described object, the present invention provides a station for receiving a message from an interconnected station on the input side and transmitting the message information relating to the received message to the interconnected station on the output side, this station comprising congestion control means composed of congestion detection means for detecting the occurrence of congestion in the

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interconnected station on the output side and response means for responding by delaying for the prescribed time the response to the request to receive and accept the message from the interconnected station on the input side when the occurrence of congestion has been detected with the congestion detection means.

Further, in the station in accordance with the present invention, the prescribed delay time may be set to a time obtained by dividing the average response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

Further, in the station in accordance with the present invention, the congestion control means may have switching means for switching the message information of the session in which the congestion has occurred to another session when the occurrence of congestion has been detected in the congestion detection means.

Furthermore, in the station in accordance with the present invention, when there are a plurality of interconnected stations on the output side and the congestion has occurred or a closed state has been assumed in all the sessions to specific interconnected stations on the output side, the switching means may distribute and send the message information to other interconnected stations on the output side.

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Further, in the station in accordance with the present invention, congestion detection means may detect that congestion has occurred in the interconnected station on the output side when an error indicating congestion has been returned from the interconnected station on the output side in response to a request to transfer the message information to the interconnected station on the output side.

Furthermore, in the station in accordance with the present invention, the congestion detection means may detect that congestion has occurred in the interconnected station on the output side from a parameter representing a congested state in the response from the interconnected station on the output side to a request to transfer the message information to the interconnected station on the output side, this parameter being contained in the response.

Further, in the station in accordance with the present invention, the congestion detection means may detect that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer the message information to the interconnected station on the output side.

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Further, in the station in accordance with the present invention, the congestion detection means may have issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the interconnected station on the output side that has been detected to be in a congested state in the congestion control means, and the congestion detection means may detect that a congested state in the session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from the issuance means became equal to or less than the average response time in the normal state.

In order to attain the above-described object, the present invention provides another station for receiving a message from an interconnected station on the input side and transmitting the message information relating to the received message to the interconnected station on the output side, the another station comprising congestion control means composed of congestion detection means which detects the occurrence of congestion in the own station when the filling ratio in a buffer memory that stores the messages or received requests that have not been completely processed exceeds the prescribed filling ratio, and response means for responding by delaying for the prescribed time the response to the request to receive and accept the message from the interconnected station on the input side when the occurrence

COPY

of congestion in the own station has been detected in the congestion detection means.

Further, in the other station in accordance with the present invention, the prescribed delay time may be a time obtained by dividing the average response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

Furthermore, in the other station in accordance with the present invention, the congestion control means may allow for the detection of congestion occurrence in the interconnected station on the output side and may have switching means for switching the message information of the session in which the congestion has occurred to another session when the occurrence of congestion in the interconnected station on the output side has been detected in the congestion detection means.

Further, in the other station in accordance with the present invention, when there are a plurality of interconnected stations on the output side and the congestion has occurred or a closed state has been assumed in all the sessions to specific interconnected stations on the output side, the switching means may distribute and send the message information to other interconnected stations on the output side.

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Furthermore, in the other station in accordance with the present invention, the congestion detection means may detect that congestion has occurred in the interconnected station on the output side when an error indicating congestion has been returned from the interconnected station on the output side in response to a request to transfer the message information to the interconnected station on the output side.

Furthermore, in the other station in accordance with the present invention, the congestion detection means may detect that congestion has occurred in the interconnected station on the output side from a parameter representing a congested state in the response from the interconnected station on the output side to a request to transfer the message information to the interconnected station on the output side, this parameter being contained in the response.

Furthermore, in the other station in accordance with the present invention, the congestion detection means may detect that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer the message information to the interconnected station on the output side.

COPY

Furthermore, in the other station in accordance with the present invention, the congestion detection means may have issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the interconnected station on the output side that has been detected to be in a congested state by the congestion control means, and the congestion detection means may detect that a congested state in a session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from the issuance means became equal to or less than the average response time in the normal state.

With the above-described present invention, when congestion occurs in the own station or an interconnected station on the output side, the response to a request to receive and accept a message from the interconnected station on the input side is delayed for the prescribed time and the throughput on the input side is reduced. As a result, the degree of retention on the output side can be gradually reduced and, therefore, the congestion of the own station or the interconnected station on the output side can be eliminated.

Furthermore, when congestion occurs in the interconnected station on the output side, message information of the session where the congestion has occurred is switched to another session and distributed to other interconnected stations on the output

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side. As a result, the congestion in the interconnected station on the output side can be eliminated even faster. The occurrence of congestion in the interconnected station on the output side can be detected from the average response time or parameters representing the state of congestion, which are present in the response from the interconnected station on the output side, and the elimination of the congestion state also can be detected from the average response time.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates schematically the configuration of the station of the preferred embodiment of the present invention is in FIGS; this figure shows a state in which congestion has occurred in a specific session;

FIG. 2 illustrates schematically the configuration of the station of the preferred embodiment of the present invention is in FIGS; this figure shows a state in which congestion has occurred in a specific SMSC;

FIG. 3 illustrates schematically the configuration of the station of the preferred embodiment of the present invention is in FIGS; this figure shows a state in which congestion has occurred in all the SMSC;

FIG. 4 illustrates congestion control executed in the PPG which is a station in accordance with the present invention; and

COPY

FIG. 5 illustrates an example of prior art configuration of the allocation system of multimedia messages.

BEST MODE FOR CARRYING OUT THE INVENTION

The configuration of the station of the preferred embodiment of the present invention is shown schematically in FIGS 1 to 3. FIG. 1 shows a state in which congestion has occurred in a specific session. FIG. 2 shows a state in which congestion has occurred in a specific SMSC. FIG. 3 shows a state in which congestion has occurred in all the SMSC.

FIG. 1 shows only the configuration of the MMS 1, PPG 2, and SMSC 3 in the multimedia message allocation system shown in FIG. 5. The PPG 2 is composed of 2 units: a first PPG (PPG1) 21 and a second PPG (PPG2), and the SMSC 3 is also composed of two units: a first SMSC (SMSC1) 31 and a second SMSC (SMSC2) 32.

The congestion control means of the station in accordance with the present invention will be explained hereinbelow with reference to FIG. 1. If the MMS 1 receives a multimedia message (MM-message), the MM-message is stored in a mailbox 1a of the subscriber, which is a customer in the mailbox 1a, a reception notification to the customer is produced, and transfer thereof is initiated. As a result, the MMS 1 sends a push transfer request of notification, for example, to the first PPG 21. This push transfer request is received by an input interface 21a of the

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first PPG 21 and temporarily stored in a buffer memory 21b. An internal processing unit 21c reads successively the push transfer requests that were stacked in the buffer memory 21b and produces a session establishment request so that a network corresponding to each push transfer request is initiated. The session establishment request is temporarily stored in a corresponding memory of buffer memories 21d, 21e, 21f, 21g provided for each of the four provided output interfaces 21h, 21i, 21j, 21k. If we assume that the session establishment request is stored in the buffer memory 21d, then the session establishment requests that were stacked in the buffer memory 21d are read successively and sent from the output interface 21h to the first SMSC 31.

The sent session establishment requests are received in an interface (I/F) 31a of the first SMSC 31 and sent as short messages from the first SMSC 31 to a portable terminal not shown in FIG. 1 of the destination address. Further, if the session establishment request is stored in the buffer memory 21e, then the session establishment requests that were stacked in the buffer memory 21e are read successively and sent from the output interface 21i to the first SMSC 31. The sent session establishment requests are received in an interface (I/F) 31b of the first SMSC 31 and sent as short messages from the first SMSC 31 to a portable terminal not shown in FIG. 1 of the destination address. Further, if the session establishment request is stored

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in the buffer memory 21f, then the session establishment requests that were stacked in the buffer memory 21f are read successively and sent from the output interface 21j to the second SMSC 32. The sent session establishment requests are received in an interface (I/F) 32a of the second SMSC 32 and sent as short messages from the second SMSC 32 to a portable terminal not shown in FIG 1 of the destination address. Furthermore, if the session establishment request is stored in the buffer memory 21g, then the session establishment requests that were stacked in the buffer memory 21g are read successively and sent from the output interface 21k to the second SMSC 32. The sent session establishment requests are received in an interface (I/F) 32b of the second SMSC 32 and sent as short messages from the second SMSC 32 to a portable terminal not shown in FIG. 1 of the destination address.

Similar operations are also carried out with respect to session establishment requests sent from the second PPG 22 to the first SMSC 31 and second SMSC 32. Here, if the message number of the session establishment requests sent from the first PPG 21 and second PPG 22 exceeds the amount that can be processed in the first SMSC 31 and second SMSC 32, then congestion occurs in the first SMSC 31 and second SMSC 32. In this case, the definition of congestion occurrence is based on any of the below-described events. In this definition the first PPG 21 and second PPG 22

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are considered as a PPG, and the first SMSC 31 or second SMSC 32 is considered as the SMSC.

(1) When an error indicating the congestion of the session was returned from the SMSC with respect to a message submit_sm or message data_sm of the message transfer request from the PPG to the SMSC.

(2) When the response to message submit_sm or message data_sm of the message transfer request contains a congestion_state parameter representing the congestion state in percents and the value of this parameter reaches a value indicating the congestion of the SMSC.

(3) When the average response time from the SMSC to k latest requests from the message transfers request from the PPG exceeds m times of the average response time in a normal state. Here, k and m can be set and varied by parameters or the like.

It is assumed that the occurrence of congestion in the session in the interface 31a of the first SMSC 31, which is an interconnected station of the first PPG 21, is detected based on this definition. This is shown by the buffer memory 21d becoming a Full Queue as ① in FIG. 1. When congestion of the interconnected station thus occurs in a specific SMPP session, the first PPG 21 eliminates the congestion in the manner as follows. Thus, the first PPG 21 continues the service by switching the messages to the interface 31b, which is another

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reduced. Therefore, the PPG interconnected station congestion or circuit block state in all the SMSC can be gradually eliminated.

As described hereinabove, in the station in accordance with the present invention, when congestion occurs in an interconnected station on the output side, the service can be continued by allocating messages to another session on the output side or to another interconnected station on the output side. In addition, the congestion may be eliminated by returning the response to the request from the interconnected station on the input side with a prescribed delay. Thus, in the station in accordance with the present invention, a mechanism is provided for detecting changes in the transfer efficiency on the output side and the acceptance number on the input side is reduced when the transfer efficiency has degraded. Further, when congestion occurs in all the interconnected stations on the output side, the acceptance of the request from the interconnected station on the input side may be denied. Thus, with the station in accordance with the present invention, the occurrence of congestion can be prevented or congestion can be eliminated without additional improvements of the interconnected stations. Therefore, the congestion control of the SMSC that heretofore required the maintenance personnel to conduct monitoring and take care of the system can be automated, thereby making contribution to the reduction of maintenance and operation cost of the PPG.

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As described hereinabove, because the PPG conducts congestion control, the congestion that has occurred in the SMSC can be gradually eliminated. Here, the definition of "PPG interconnected station congestion" elimination is based on the occurrence of any of the following events.

(1) The PPG issues a message `enquire_link` request, which is a circuit state verification message, with n -second intervals to the SMPP session that assumed a PPG interconnected station congestion state. The congestion is considered to be eliminated when the average response time to the k latest message `enquire_link` requests is within the average response time in a normal state. The k and transmission interval spacing n can be set and varied by parameters or the like.

(2) The congestion is considered to be eliminated when the average response time to the latest k message `enquire_link` requests is below the average response time in a normal state.

Once congestion has been detected to be eliminated in the session in which the congestion has occurred in the PPG based on such definition, the above-described congestion control relating to this session is cancelled.

However, congestion occurs not only in the interconnected stations, but also in the PPG which is a station by itself. Explanation will be conducted below by considering the first PPG 21 as an example, with reference to a graph illustrating a

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filling ratio shown in the upper part in FIG. 4. In the first PPG 21 shown in FIGS 1 to 3, the accepted unprocessed messages or requests are accumulated in the buffer memory 21b. Assuming that the maximum capacity available for accumulation in the buffer memory 21b is 100%, if the filling ratio exceeds h%, then the "PPG own station congestion" is considered to occur as an excess over an amount that can be processed in the internal processing unit 21c. Further, the filling ratio becoming less than l% defines the "PPG own station congestion". Here, h and l can be set and varied by parameters or the like.

If the filling ratio in the buffer memory 21b in the first PPG 21 is detected to exceed h%, a decision is made that a "PPG own station congestion" has occurred and the first PPG 21 sends a reception-acceptance response (push-response) to the push transfer request from the MMS 1 after the delay time Dt, which can be calculated by the following formula, elapses.

$$Dt = \text{SMPP average response time} / \text{SMPP session number} \times S \quad (1)$$

Here, S is a margin ratio less than 1, that can be set and varied by parameters or the like. Further, when the in the buffer memory 21b of the becomes 100%, the first PPG 21 denies a push transfer request from the MMS 1 until the filling ratio becomes lower than h%. If the PPG conducts congestion control as

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described above, the congestion that occurred in the own station is gradually eliminated. Further, when the filling ratio becomes less than 1%, the response to the push transfer request is sent without any delay to the MMS 1.

The above-described congestion control executed in the PPG which is the station in accordance with the present invention will be explained below with reference to FIG. 4.

The SMPP response time in the output interfaces 21h-21k of the first PPG 21 are measured in the first PPG 21. Changes in the measured SMPP response time with time t are shown by a graph presented in the lower part of FIG. 4. In this graph, time t_a represents the average response time in the normal state to the session establishment request. When the average SMPP response time to k latest session establishment requests exceeds the time mt_a obtained by multiplying the time t_a by m , then congestion is assumed to occur in the interconnected station of the first PPG 21 and the PAP response time, which is a response time to the push transfer request in the input interface 21a, is adjusted. This adjustment is conducted by delaying the reception-acceptance response for the delay time Dt calculated by Formula (1) presented above.

In the upper part of FIG. 4, there is shown a graph illustrating changes in the filling ratio with time t in the buffer memory 21b where the accepted unprocessed messages or

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requests are accumulated. Variations of the filling ratio in the buffer memory 21b are monitored and when the filling ratio exceeds $h\%$, a decision is made that congestion has occurred in the first PPG 21 and the PAP response time, which is a response time to the push transfer request in the input interface 21a, is adjusted. This adjustment is conducted by delaying the response for the delay time Dt calculated by Formula (1) presented above. When the filling ratio becomes less than $l\%$, a decision is made that the congestion in the first PPG 21 was eliminated and the adjustment of the PAP response time is canceled.

The explanation above was considered with respect to the PPG as the station in accordance with the present invention, but the present invention is not limited to such a configuration, and the congestion control means provided in the station in accordance with the present invention also can be applied to station in which the occurrence of congestion cannot be autonomously prevented or eliminated.

INDUSTRIAL APPLICABILITY

As described hereinabove, in the station in accordance with the present invention, when congestion occurs in the own station or an interconnected station on the output side, the throughput on the input side is reduced by delaying for the prescribed time the response to a request to receive and accept the message from

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the interconnected station on the input side. As a result, the degree of retention on the output side can be gradually reduced and the congestion of the own station or the interconnected station on the output side can be eliminated.

Furthermore, when congestion occurs in the interconnected station on the output side, message information of the session where the congestion has occurred is switched to another session and distributed to other interconnected stations on the output side. As a result, the congestion in the interconnected station on the output side can be eliminated even faster. The occurrence of congestion in the interconnected station on the output side can be detected from the average response time or parameters representing the state of congestion, which are present in the response from the interconnected station on the output side, and the elimination of the congestion state also can be detected from the average response time.

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CLAIMS

1. A station for receiving a message from an interconnected station on the input side and transmitting message information relating to the received message to an interconnected station on the output side, comprising

congestion control means composed of congestion detection means for detecting the occurrence of congestion in the interconnected station on the output side and response means for responding by delaying for a prescribed time the response to the request to receive and accept said message from the interconnected station on the input side when the occurrence of congestion is detected by said congestion detection means.

2. The station according to claim 1, wherein said prescribed delay time is a time obtained by dividing an average response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

3. The station according to claim 1, wherein said congestion control means has switching means for switching said message information of the session in which the congestion has occurred to another session when the occurrence of congestion is detected in said congestion detection means.

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SMPP session directed toward the first SMSC 31, as shown by ② in the figure, so that the number of messages directed toward this session in a unit interval becomes $1/m$ or less.

Thus, in the PPG which is the station in accordance with the present invention, when congestion occurs in the PPG interconnected station in a specific SMPP session, the PPG continues the service by switching the messages to another SMPP session directed toward the same SMSC so that the number of messages directed toward this session in a unit interval becomes $1/m$ or less.

If the acceptance response to a push transfer request from the MMS 1 to the PPG is delayed for the prescribed time when congestion has occurred in the PPG interconnected station in a specific SMPP session, then, the acceptance number of push transfer requests can be reduced. Therefore, the congestion occurring in a specific SMPP session can be gradually eliminated. This delay time can be considered as the below-described delay time Dt .

Further, let us assume that congestion was detected to occur in both the session in the interface 31a and the session in the interface 31b of the first SMSC 31 which is an interconnected station of the first PPG 21. This is shown by the buffer memory 21d and buffer memory 21e becoming a Full Queue as ①③ in FIG. 2. When congestion of the interconnected station thus occurs in all

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the SMPP sessions directed toward the first SMSC 31, the first PPG 21 eliminates the congestion in the manner as follows. Thus, when all the sessions directed toward the first SMSC 31 are in a state of PPG interconnected station congestion or closed state, the first PPG 21 continues the service by distributing the messages equally to the second SMSC 32 which is not in a congested state, as shown by ④ in FIG. 2.

Thus, when the PPG interconnected station congestion has occurred or a closed state has been assumed in all the sessions directed toward a specific SMSC in the PPG, which is the station in accordance with the present invention, the PPG continues the service by distributing the messages equally to other SMSC.

If the acceptance response to a push transfer request from the MMS 1 to the PPG is delayed for the prescribed time when the PPG interconnected station congestion has occurred or a closed state has been assumed in all the sessions directed toward a specific SMSC in the PPG, then, the acceptance number of push transfer requests can be reduced. Therefore, the congestion that has occurred in all the sessions of a specific SMSC can be successively eliminated. This delay time can be considered as the below-described delay time D_t .

Further, let us assume that congestion was detected to occur in all the sessions of the first SMSC 31 and second SMSC 32 which are the interconnected stations of the first PPG 21. This is

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shown by all the buffer memories from the buffer memory 21d to the buffer memory 21g becoming a Full Queue as ①③⑤ in FIG. 3. When congestion of the interconnected stations thus occurs in all the SMPP sessions directed toward the first SMSC 31 and second SMSC 32, the first PPG 21 eliminates the congestion in the manner as follows. Thus, when the PPG interconnected station congestion has occurred or a circuit block state has been assumed in the first SMSC 31 and second SMSC 32, the first PPG 21 denies the acceptance of the push transfer request from the MMS 1. As a result, the filling amount of buffer memories from the buffer memory 21d to buffer memory 21g decreases gradually and the of PPG interconnected station congestion or circuit block state is eliminated.

Thus, in the PPG, which is the station in accordance with the present invention, when the PPG interconnected station congestion has occurred or a closed state has been assumed in all the SMSC, the PPG denies the acceptance of the push transfer request from the MMS, thereby eliminating the PPG interconnected station congestion or circuit block state. Further, instead of denying the acceptance of the push transfer request, the acceptance response to the push transfer request from the MMS 1 to the PPG may be delayed for the prescribed time. This delay time can be considered as the below-described delay time D_t . As a result, the acceptance number of push transfer requests can be

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4. The station according to claim 3, wherein when there are a plurality of interconnected stations on the output side and the congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

5. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when an error indicating congestion is returned from the interconnected station on the output side in response to a request to transfer said message information to the interconnected station on the output side.

6. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side from a parameter representing a congested state in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station

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on the output side, this parameter being contained in said response.

7. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side.

8. The station according to claim 1, wherein said congestion detection means has issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the interconnected station on the output side that has been detected to be in a congested state by said congestion control means, and said congestion detection means detects that a congested state in the session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from said issuance means has become equal to or less than the average response time in the normal state.

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9. A station for receiving a message from an interconnected station on the input side and transmitting message information relating to the received message to an interconnected station on the output side, comprising

congestion control means composed of congestion detection means which detects the occurrence of congestion in the own station when the filling ratio in a buffer memory that stores said messages or received requests that have not been completely processed exceeds a prescribed filling ratio, and response means for responding by delaying for a prescribed time the response to the request to receive and accept said message from the interconnected station on the input side when the occurrence of congestion in the own station is detected in said congestion detection means.

10. The station according to claim 9, wherein said prescribed delay time is a time obtained by dividing an average response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

11. The station according to claim 9, wherein said congestion control means allows for the detection of congestion occurrence in the interconnected station on the output side and

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has switching means for switching said message information of the session in which the congestion has occurred to another session when the occurrence of congestion in the interconnected station on the output side is detected by said congestion detection means.

12. The station according to claim 11, wherein when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

13. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when an error indicating congestion has been returned from the interconnected station on the output side in response to a request to transfer said message information to the interconnected station on the output side.

14. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side from a parameter representing a congested state in the response from the

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interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side, this parameter being contained in said response.

15. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side.

16. The station according to claim 9, wherein said congestion detection means has issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the interconnected station on the output side that has been detected to be in a congested state by said congestion control means, and said congestion detection means detects that a congested state in a session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from said issuance means has

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become equal to or less than the average response time in the normal state.

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ABSTRACT

With the object of eliminating congestion that has occurred in a station which can not prevent or eliminate the occurrence of congestion autonomously, the SMPP response time in output interfaces 21h-21k of a first PPG 21 are measured and when the time mta , which is m -times of the SMPP response time t_a in the normal state, is exceeded, congestion is assumed to occur in an interconnected station of the first PPG 21 and the response to push transfer request in an input interface 21a is delayed. Further, changes in the filling ratio in a buffer memory 21b are monitored and when the filling ratio exceeds $h\%$, a decision is made that congestion has occurred in the first PPG 21 and the response to the push transfer request in the input interface 21a is delayed.

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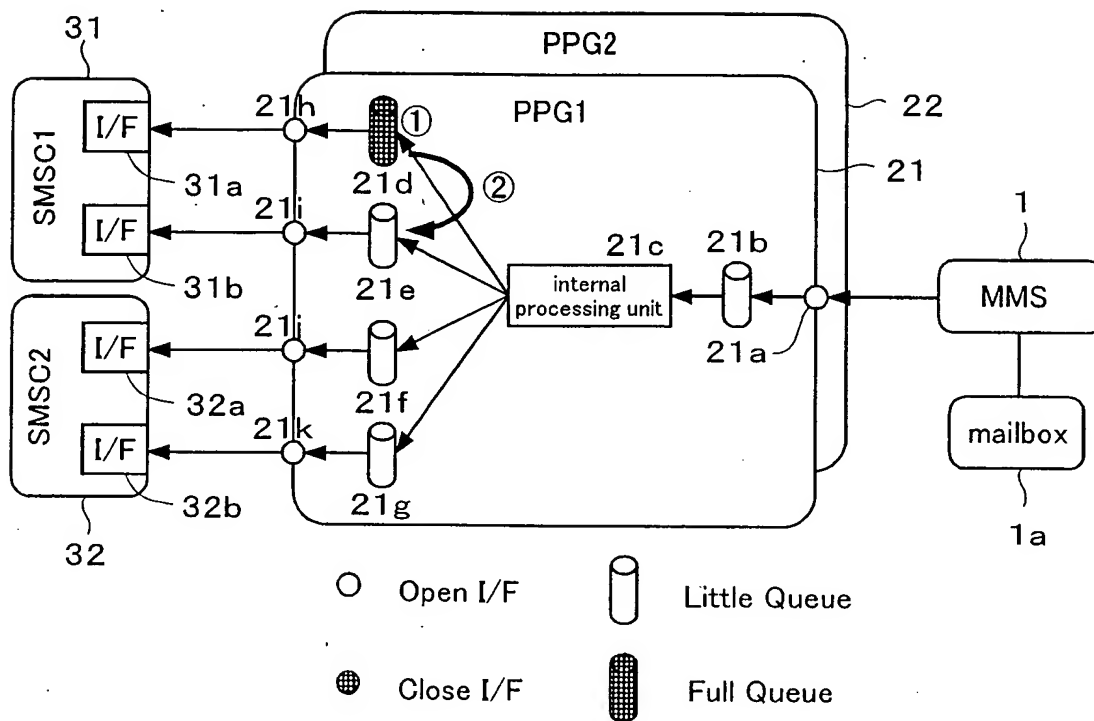


FIG.1

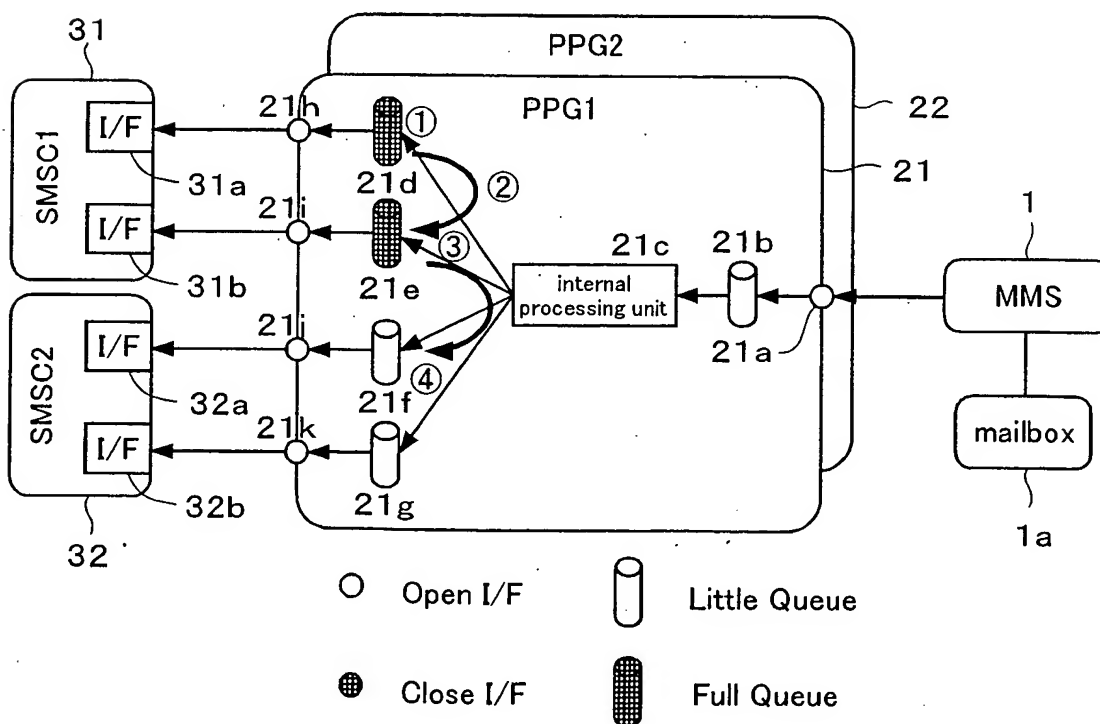


FIG.2

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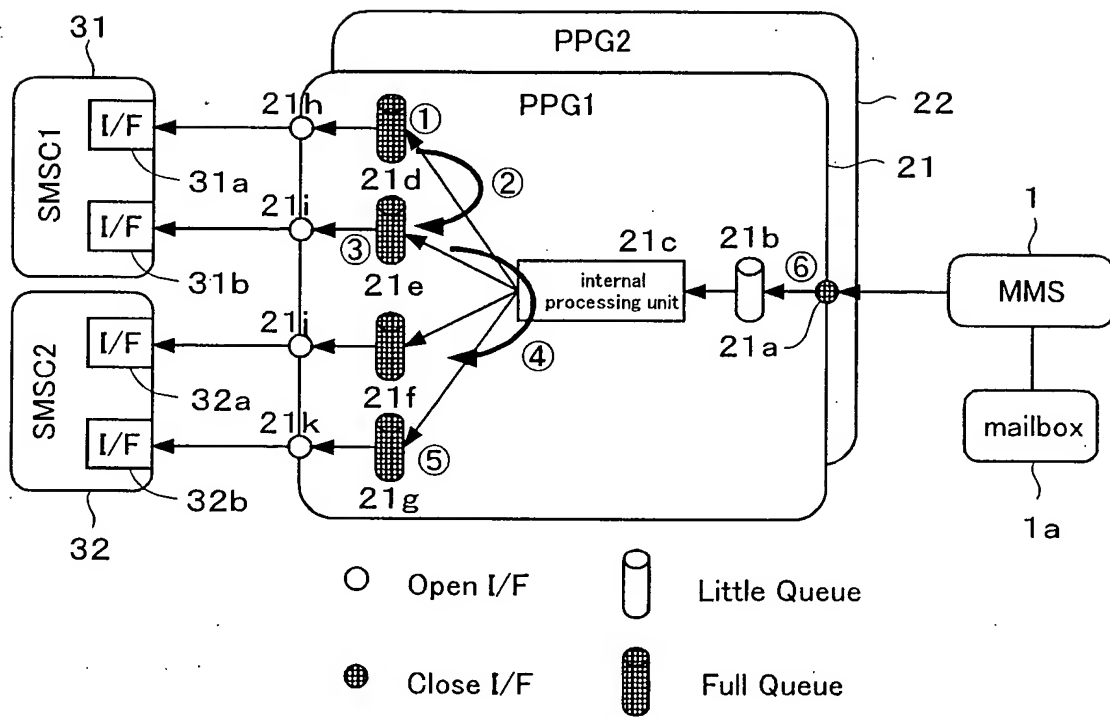


FIG.3

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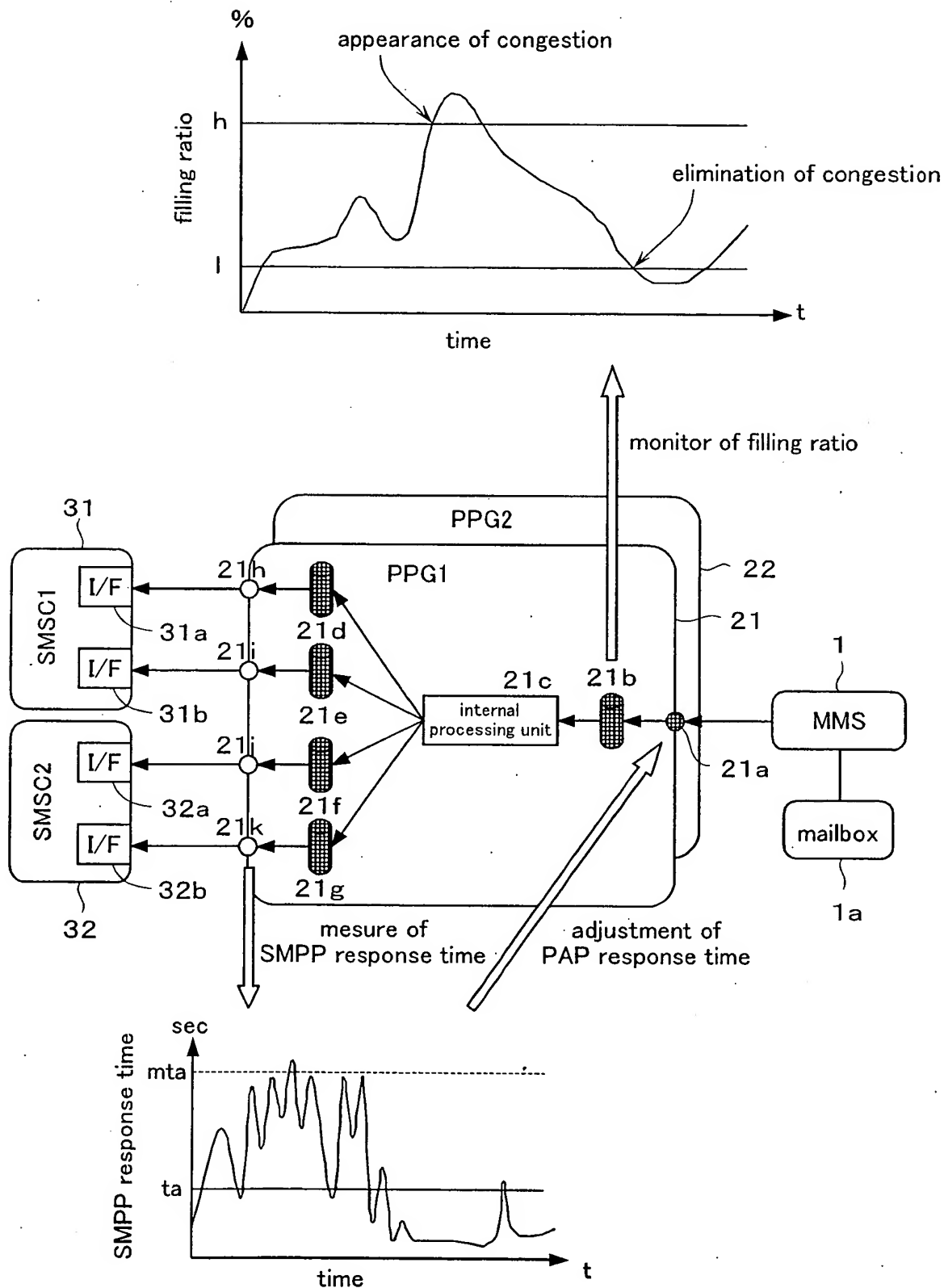


FIG.4

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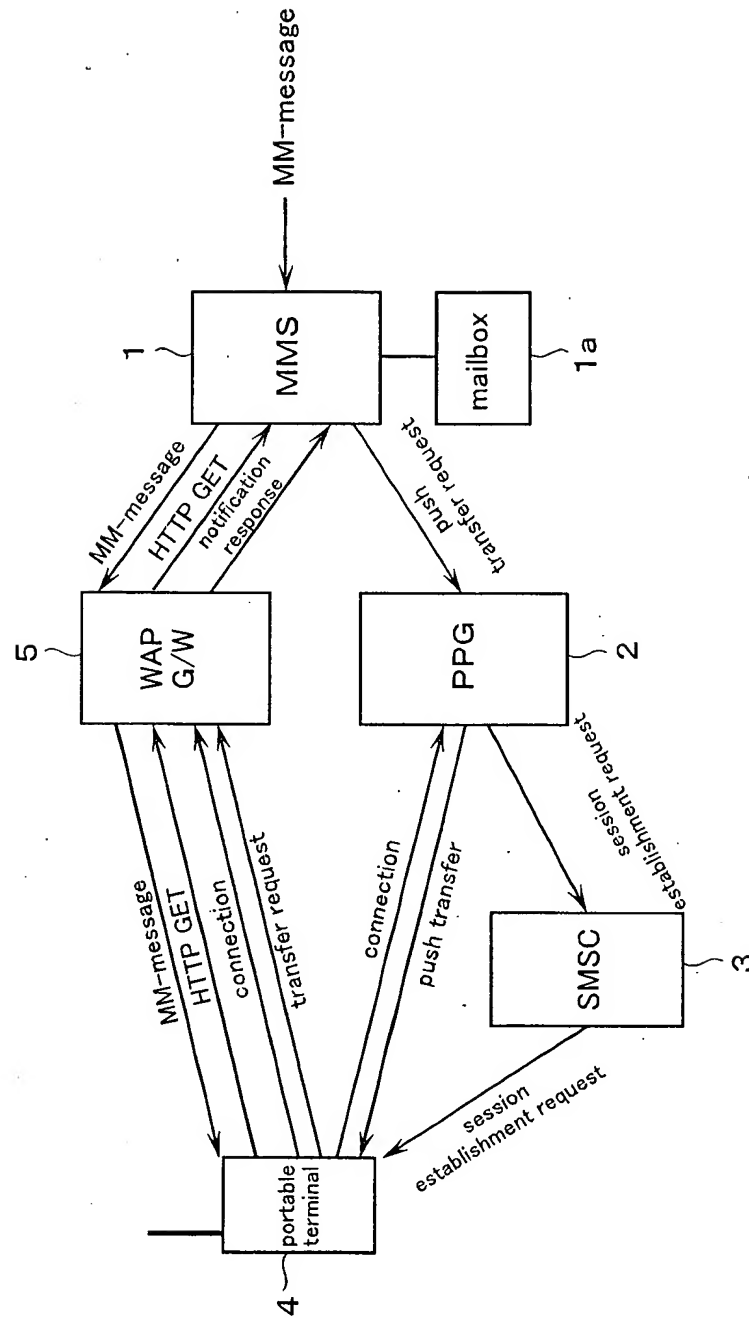


FIG.5 Prior art

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From the INTERNATIONAL BUREAU

FIRST NOTICE INFORMING THE APPLICANT OF
THE COMMUNICATION OF THE INTERNATIONAL
APPLICATION (TO DESIGNATED OFFICES WHICH
DO NOT APPLY THE 30 MONTH TIME LIMIT
UNDER ARTICLE 22(1))

To:

ASAMI, Yasuo
Yukon Tokkyo Jimusho
Shinkawa-Ohara Bldg. 6F
27-8, Shinkawa 1-chome
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JAPON

(PCT Rule 47.1(c))

| | | | |
|--|--|--|--|
| Date of mailing (day/month/year) 21 October 2004 (21.10.2004) | | IMPORTANT NOTICE | |
| Applicant's or agent's file reference SDSD02067PCT | | | |
| International application No. PCT/JP2004/002756 | International filing date (day/month/year) 04 March 2004 (04.03.2004) | Priority date (day/month/year) 17 March 2003 (17.03.2003) | |
| Applicant VODAFONE K.K. et al | | | |

1. **ATTENTION:** For any designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002 (30 months from the priority date), **does apply**, please see Form PCT/IB/308(Second and Supplementary Notice) (to be issued promptly after the expiration of 28 months from the priority date).
2. Notice is hereby given that the following designated Office(s), for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, has/have requested that the communication of the international application, as provided for in Article 20, be effected under Rule 93bis.1. The International Bureau has effected that communication on the date indicated below:
30 September 2004 (30.09.2004)

CH

In accordance with Rule 47.1(c-bis)(i), those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

3. The following designated Offices, for which the time limit under Article 22(1), as in force from 1 April 2002, **does not apply**, have not requested, as at the time of mailing of the present notice, that the communication of the international application be effected under Rule 93bis.1 :

FI, LU, SE, TZ, UG, ZM

In accordance with Rule 47.1(c-bis)(ii), those Offices accept the present notice as conclusive evidence that the Contracting State for which that Office acts as a designated Office does not require the furnishing, under Article 22, by the applicant of a copy of the international application.

4. TIME LIMITS for entry into the national phase

For the designated Office(s) listed above, and unless a demand for international preliminary examination has been filed before the expiration of **19 months** from the priority date (see Article 39(1)), the applicable time limit for entering the national phase will, **subject to what is said in the following paragraph**, be **20 MONTHS** from the priority date.

In practice, **time limits other than the 20-month time limit** will continue to apply, for various periods of time, in respect of certain of the designated Offices listed above. For **regular updates on the applicable time limits** (20 or 21 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Masashi Honda

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 10

COPY

Date : 12 August, 2004

The International Bureau of WIPO
34 Chemin des Colombettes
1211 Geneva 20
Switzerland

Amendment of the claims under Article 19(1) (Rule 46)

International Application No. : PCT/JP2004/002756
International Filing Date : 04 March, 2004
Applicant : Vodafone K. K. ; 5-1, Atago 2-chome Minato-ku, Tokyo
105-6205 Japan ; Tel. 03-6403-1284
Agent : ASAMI, Yasuo ; Yukon Tokkyo Jimusho, Shinkawa-Ohara BLDG.
6F 27-8, Shinkawa 1-chome Chuo-ku, Tokyo 104-0033 Japan ; Tel.
03-3553-2111
Applicant's or Agent's File reference : SDSD02067PCT

Dear sir

The Applicant, who received the International Search Report relating to the above identified International Application transmitted on 04 March, 2004, hereby files amendment under Article 19(1) as in the attached sheets.

Claims 1, 2, 3, 4, 8, 9, 11, 12, 16 are amended and claim 5, 6, 7, 10, 13, 14, 15 are retained unchanged.

The Applicant also files as attached herewith a brief statement explaining the amendment and indicating any impact that amendment therein might have on the description and drawings.

Very truly yours,


Yasuo ASAMI
PATENT ATTORNEY

Attachment :

| | |
|-----------------------------------|---------|
| (1) Amendment under Article 19(1) | 1 sheet |
| (2) Brief Statement | 1 sheet |

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CLAIMS (AMENDED)

1. (Amended) A station for receiving a message from an interconnected station on the input side and transmitting message information relating to the received message to an interconnected station on the output side, comprising

response means for returning a response to a request to receive and accept a message to the interconnected station on the input side when receiving said message from said interconnected station; and

congestion detection means for detecting that congestion has occurred in the interconnected station on the output side,

wherein when occurrence of congestion is detected by said congestion detection means, said response means conducts congestion control by responding with a delay for a prescribed time to the request to receive and accept said message from the interconnected station on the input side.

2. (Amended) The station according to claim 1, wherein said prescribed delay time is a time obtained by dividing an average response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

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3. (Amended) The station according to claim 1, wherein the congestion control is also conducted with switching means for switching said message information of the session in which the congestion has occurred to another session when the occurrence of congestion is detected by said congestion detection means.

4. (Amended) The station according to claim 3, wherein when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

5. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when an error indicating congestion is returned from the interconnected station on the output side in response to a request to transfer said message information to the interconnected station on the output side.

6. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred

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in the interconnected station on the output side from a parameter representing a congested state in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side, this parameter being contained in said response.

7. The station according to claim 1, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side.

8. (Amended) The station according to claim 1, comprising issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the interconnected station on the output side that has is to be in a congested state by said congestion control means, wherein said congestion detection means detects that a congested state in said session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from

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said issuance means has become equal to or less than the average response time in the normal state.

9. (Amended) A station for receiving a message from an interconnected station on the input side and transmitting message information relating to the received message to the interconnected station on the output side, comprising

response means for returning a response to a request to receive and accept a message to the interconnected station on the input side when receiving said message from said interconnected station; and

congestion detection means which detects the occurrence of congestion in the own station when the filling ratio in a buffer memory that stores said messages or received requests that have not been completely processed exceeds a prescribed filling ratio,

wherein when the occurrence of congestion in the own station is detected by said congestion detection means, said response means conducts congestion control by responding with a delay for a prescribed time to the request to receive and accept said message from the interconnected station on the input side.

10. The station according to claim 9, wherein said prescribed delay time is a time obtained by dividing an average

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response time from the interconnected station on the output side by a session number in the interconnected station on the output side that is multiplied by a margin ratio.

11. (Amended) The station according to claim 9, wherein the congestion control is also conducted with switching means for switching said message information of the session in which the congestion has occurred to another session when the occurrence of congestion in the interconnected station on the output side is detected by said congestion detection means.

12. (Amended) The station according to claim 11, wherein when there are a plurality of interconnected stations on the output side and congestion has occurred or a closed state has been assumed in all the sessions to a specific interconnected station on the output side, said switching means distributes and sends said message information to other interconnected stations on the output side.

13. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when an error indicating congestion has been returned from the interconnected station on the output side in response to a request to transfer

COPY

said message information to the interconnected station on the output side.

14. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side from a parameter representing a congested state in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side, this parameter being contained in said response.

15. The station according to claim 9, wherein said congestion detection means detects that congestion has occurred in the interconnected station on the output side when the average response time in a plurality of the latest responses has reached m times (where $m > 1$) of the average response time in the normal state, in the response from the interconnected station on the output side to a request to transfer said message information to the interconnected station on the output side.

16. (Amended) The station according to claim 9, comprising issuance means for issuing a circuit state verification request with a prescribed period with respect to a session in the

COPY

interconnected station on the output side that is detected to be in a congested state by said congestion control means, wherein said congestion detection means detects that the congested state in said session has been eliminated when the average response time in a plurality of the latest responses to the issued requests from said issuance means has become equal to or less than the average response time in the normal state.

発信人 日本国特許庁（国際調査機関）

COPY

出願人代理人

浅見 保男

様

あて名

〒 104-0033

東京都中央区新川1丁目27番8号
新川大原ビル6階 雄渾特許事務所

PCT

国際調査機関の見解書
（法施行規則第40条の2）
〔PCT規則43の2.1〕発送日
（日.月.年）

22.6.2004

出願人又は代理人
の書類記号

SDSD02067PCT

今後の手続きについては、下記2を参照すること。

国際出願番号

PCT/JP2004/002756

国際出願日

（日.月.年） 04.03.2004

優先日

（日.月.年） 17.03.2003

国際特許分類（IPC）

Int. Cl⁷ H04Q7/34, H04B7/26

出願人（氏名又は名称）

ボーダフォン株式会社

1. この見解書は次の内容を含む。

- ☒ 第Ⅰ欄 見解の基礎
- ☐ 第Ⅱ欄 優先権
- ☐ 第Ⅲ欄 新規性、進歩性又は産業上の利用可能性についての見解の不作成
- ☐ 第Ⅳ欄 発明の単一性の欠如
- ☒ 第Ⅴ欄 PCT規則43の2.1(a)(i)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明
- ☐ 第Ⅵ欄 ある種の引用文献
- ☐ 第Ⅶ欄 国際出願の不備
- ☐ 第Ⅷ欄 国際出願に対する意見

2. 今後の手続き

国際予備審査の請求がされた場合は、出願人がこの国際調査機関とは異なる国際予備審査機関を選択し、かつ、その国際予備審査機関がPCT規則66.1の2(b)の規定に基づいて国際調査機関の見解書を国際予備審査機関の見解書とみなさない旨を国際事務局に通知していた場合を除いて、この見解書は国際予備審査機関の最初の見解書とみなされる。

この見解書が上記のように国際予備審査機関の見解書とみなされる場合、様式PCT/ISA/220を送付した日から3月又は優先日から22月のうちいずれか遅く満了する期限が経過するまでに、出願人は国際予備審査機関に、適当な場合は補正書とともに、答弁書を提出することができる。

さらなる選択肢は、様式PCT/ISA/220を参照すること。

3. さらなる詳細は、様式PCT/ISA/220の備考を参照すること。

見解書を作成した日

01.06.2004

名称及びあて先

日本国特許庁（ISA/JP）
郵便番号100-8915
東京都千代田区霞が関三丁目4番3号

特許庁審査官（権限のある職員）

桑江 晃

5J

4239

電話番号 03-3581-1101 内線 3534

第 I 欄 見解の基礎

1. この見解書は、下記に示す場合を除くほか、国際出願の言語を基礎として作成された。

- ☐ この見解書は、_____ 語による翻訳文を基礎として作成した。
それは国際調査のために提出された PCT 規則 12.3 及び 23.1(b) にいう翻訳文の言語である。

2. この国際出願で開示されかつ請求の範囲に係る発明に不可欠なヌクレオチド又はアミノ酸配列に関して、以下に基づき見解書を作成した。

a. タイプ ☐ 配列表

☐ 配列表に関連するテーブル

b. フォーマット ☐ 書面

☐ コンピュータ読み取り可能な形式

c. 提出時期 ☐ 出願時の国際出願に含まれる

☐ この国際出願と共にコンピュータ読み取り可能な形式により提出された

☐ 出願後に、調査のために、この国際調査機関に提出された

3. ☐ さらに、配列表又は配列表に関連するテーブルを提出した場合に、出願後に提出した配列若しくは追加して提出した配列が出願時に提出した配列と同一である旨、又は、出願時の開示を超える事項を含まない旨の陳述書の提出があった。

4. 補足意見：

第V欄 新規性、進歩性又は産業上の利用可能性についてのPCT規則43の2.1(a)(i)に定める見解、それを裏付ける文献及び説明

1. 見解

| | | | |
|----------------|-------|------------|--------|
| 新規性 (N) | 請求の範囲 | 3, 4, 8-16 | 有 無 |
| | 請求の範囲 | 1, 2, 5-7 | |
| 進歩性 (IS) | 請求の範囲 | 8, 16 | 有 無 |
| | 請求の範囲 | 1-7, 9-15 | |
| 産業上の利用可能性 (IA) | 請求の範囲 | 1-16 | 有 無 |
| | 請求の範囲 | | |

2. 文献及び説明

文献1: JP 11-513868 A (テレフオンアクチーポラゲット エル エム エリクソン), 1989. 11. 24

文献2: JP 2002-77300 A (株式会社エヌ・ティ・ティ・ドコモ), 2002. 03. 15

文献3: JP 2002-368802 A (株式会社エヌ・ティ・ティ・ドコモ), 2002. 12. 20

文献4: JP 2001-268651 A (ソニー株式会社), 2001. 09. 28

文献5: JP 2002-185500 A (日本電気株式会社), 2002. 06. 28

・請求の範囲1, 2, 5-7について

文献1には、パケットリポートにより輻輳を検出し、データパケットの遅延値を決定して輻輳制御を行う点が記載されており、請求の範囲1, 2, 5-7は新規性、進歩性を有しない。

また、文献2の図14～図22及び段落【0094】～【0136】には、広告ウィンドウサイズにより輻輳を検出し、ACK転送遅延時間を決定して輻輳制御を行う点が記載されており、請求の範囲1, 2, 5, 6は、新規性、進歩性を有しない。

・請求の範囲9-15について

文献3の要約、請求項1、図1には、輻輳の抑制のためにパケット転送用バッファ部の充填率を検出しており、文献1又は2に記載された輻輳検出手段に適用することは当業者が容易に成し得る事項である。

・請求の範囲3, 4, 11, 12について

文献4の要約、請求項14、段落【0021】、【0022】、【0085】～【0101】又は文献5の要約、請求項1には、輻輳が発生している際に、他のセッションへ振り替える振替手段が記載されており、文献1又は文献2に記載された輻輳制御手段に適用することは当業者が容易に成し得る事項である。

補充欄

いずれかの欄の大きさが足りない場合

第 V.2 欄の続き

・請求の範囲 8, 16 について

輻輳制御手段において輻輳状態に所定周期で回線状態確認要求を発行し、輻輳検出手段が直近の複数の応答における平均応答時間で輻輳状態の解消を検出することは、国際調査報告に引用されたいずれの文献にも記載されておらず、当業者にとって自明なものでもない。

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ H04Q7/34

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H04B7/24-7/26, H04Q7/00-7/38, H04L12/50-12/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004

Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-------------|--|--------------------------------------|
| X Y A | JP 11-513868 A (Telefonaktiebolaget LM Ericsson (publ)), 24 November, 1989 (24.11.89), Full text; all drawings & WO 9716039 A1 & AU 9673550 A & US 5757772 A1 & EP 857398 A1 & CN 1204443 A & KR 99067005 A | 1, 2, 5-7 3, 4, 9-15 8, 16 |
| X Y A | JP 2002-77300 A (NTT Docomo Inc.), 15 March, 2002 (15.03.02), Figs. 14 to 22; Par. Nos. [0094] to [0136] (Family: none) | 1, 2, 5, 6 3, 4, 7, 9-15 8, 16 |

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

01 June, 2004 (01.06.04)

Date of mailing of the international search report

22 June, 2004 (22.06.04)

Name and mailing address of the ISA/

Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

C (続き) 関連すると認められる文献

| 引用文献の カテゴリー* | 引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示 | 関連する 請求の範囲の番号 |
|-----------------|---|--------------------------------------|
| X Y A | J P 2002-77300 A (株式会社エヌ・ティ・ティ・ド コモ) 2002. 03. 15, 図14~図22, 段落【0094】 ~ 【0136】 (ファミリーなし) | 1, 2, 5, 6 3, 4, 7, 9-15 8, 16 |
| Y | J P 2002-368802 A (株式会社エヌ・ティ・ティ・ド コモ) 2002. 12. 20, 要約, 請求項1, 図1 (ファミリーなし) | 9-15 |
| Y | J P 2001-268651 A (ソニー株式会社) 2001. 09. 28, 要約, 請求項14 段落【0021】, 【0022】, 【0085】~【0101】 (ファミリーなし) | 3, 4, 11, 12 |
| Y | J P 2002-185500 A (日本電気株式会社) 2002. 06. 28, 要約, 請求項1 (ファミリーなし) | 3, 4, 11, 12 |
| A | J P 11-513869 A (テレフオンアクチーポラゲツト エ ル エム エリクソン) 1989. 11. 24 & WO 9716040 A1 & AU 9673551 A & EP 857399 A & CN 1204444 A & US 6097700 A & KR 99067006 A | 1-16 |
| A | J P 2003-70059 A (株式会社エヌ・ティ・ティ・ドコ モ) 2003. 03. 07, (ファミリーなし) | 1-16 |

A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl⁷ H04Q7/34

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl⁷ H04B7/24-7/26, H04Q7/00-7/38, H04L12/50-12/60

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報 1922-1996年
 日本国公開実用新案公報 1971-2004年
 日本国登録実用新案公報 1994-2004年
 日本国実用新案登録公報 1996-2004年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

C. 関連すると認められる文献

| 引用文献の カテゴリー* | 引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示 | 関連する 請求の範囲の番号 |
|-----------------|--|----------------------------------|
| X Y A | JP 11-513868 A (テレフオンアクチーポラゲット エル エム エリクソン) 1989. 11. 24, 全文, 全図 & WO 9716039 A1 & AU 9673550 A & US 5757772 A1 & EP 857398 A1 & CN 1204443 A & KR 99067005 A | 1, 2, 5-7 3, 4, 9-15 8, 16 |

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」特に関連のある文献ではなく、一般的技術水準を示すもの

「E」国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの

「L」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)

「O」口頭による開示、使用、展示等に言及する文献

「P」国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの

「X」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの

「Y」特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの

「&」同一パテントファミリー文献

国際調査を完了した日

01. 06. 2004

国際調査報告の発送日

22. 6. 2004

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

桑江 晃

5 J

4239

電話番号 03-3581-1101 内線 3534

INTERNATIONAL SEARCH REPORT

COPY

International application No.

PCT/JP2004/002756

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | JP 2002-368802 A (NTT Docomo Inc.), 20 December, 2002 (20.12.02), Abstract; Claim 1; Fig. 1 (Family: none) | 9-15 |
| Y | JP 2001-268651 A (Sony Corp.), 28 September, 2001 (28.09.01), Abstract; Claim 14; Par. Nos. [0021], [0022], [0085] to [0101] (Family: none) | 3,4,11,12 |
| Y | JP 2002-185500 A (NEC Corp.), 28 June, 2002 (28.06.02), Abstract; Claim 1 (Family: none) | 3,4,11,12 |
| A | JP 11-513869 A (Telefonaktiebolaget LM Ericsson (publ)), 24 November, 1989 (24.11.89), & WO 9716040 A1 & AU 9673551 A & EP 857399 A & CN 1204444 A & US 6097700 A & KR 99067006 A | 1-16 |
| A | JP 2003-70059 A (NTT Docomo Inc.), 07 March, 2003 (07.03.03), (Family: none) | 1-16 |

Exhibit B

Copy of credit card information sheet

COPY

PTO-2038 (02-2003)

Approved for use through 02/28/2006. OMB 0651-0043
United States Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

United States Patent and Trademark Office
Credit Card Payment Form
Please Read Instructions before Completing this Form

Credit Card Information

| | | | | |
|---|-------------------------------|-------------------------------------|---|-----------------------------------|
| Credit Card Type: | <input type="checkbox"/> Visa | <input type="checkbox"/> MasterCard | <input type="checkbox"/> American Express | <input type="checkbox"/> Discover |
| Credit Card Account #: | [REDACTED] | | | |
| Credit Card Expiration Date: | 09/05 | | | |
| Name as it Appears on Credit Card: | KIRK HAHN | | | |
| Payment Amount \$ (US Dollars): | \$1,000.00 | | | |
| Cardholder Signature: | [Signature] | | Date: | JANUARY 24, 2005 |
| <small>Refund Policy: The Office may refund a fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The office will not refund amounts of \$25.00 or less unless a refund is specifically requested, and will not notify the payor of such amounts (37 CFR § 1.26). Refund of a fee paid by credit card will be issued as a credit to the credit card account to which the fee was charged. Service Charge: There is a \$50.00 service charge for processing each payment refused (including a check returned "unpaid") or charged back by a financial institution (37 CFR § 1.21 (m)).</small> | | | | |

Credit Card Billing Address

| | |
|--|-------------------------------|
| Street Address 1: 14431 HOLT AVENUE | |
| Street Address 2: | |
| City: SANTA ANA | |
| State/Province: CALIFORNIA | Zip/Postal Code: 92705 |
| Country: USA | |
| Daytime Phone #: 714-544-2934 | Fax #: 714-544-2934 |

Request and Payment Information

Description of Request and Payment Information:

NATIONAL PHASE NON-PROVISIONAL APPLICATION

| <input checked="" type="checkbox"/> Patent Fee | <input type="checkbox"/> Patent Maintenance Fee | <input type="checkbox"/> Trademark Fee | <input type="checkbox"/> Other Fee |
|--|---|--|------------------------------------|
| Application No. | Application No. | Application No. | IDON Customer No. |
| Patent No. | Patent No. | Registration No. | |
| Attorney Docket No. ASA-007 | | Identify or Describe Mark | |

If the cardholder includes a credit card number on any form or document other than the Credit Card Payment Form, the United States Patent and Trademark Office will not be liable in the event that the credit card number becomes public knowledge.

Exhibit C

Copy of Return Postcard

COPY

PCT NATIONAL PHASE
UTILITY/DESIGN PATENT
(application)
Rec'd in the U.S.P.T.O. on the date stamped hereon via:
Express Mail No.: EU 824597103 US
Docket No.: ASA-007 Applicant: YOSHIMURA, et al.
Title: STATION
Pat. Agent: Kirk Hahn [51,763]
Date: 24 JAN 2005
PCT App. # PCT/JP2004/002756, Filed 3/4/04
VERIFIED BY: Asst: KINDSHITA Quality Control: 10/523120
☒ Patent Appl. w/ 32 pgs. incl Spec and 16 Claims
☒ Transmittal in Duplicate of Preliminary 4 pgs. of Drawings
☐ Preliminary Amendment in Amendments pgs.
☐ Declar. and Power of Atty.
☐ Declar. by Inventor(s)
☒ Filed Signed/Unsigned
☐ Assignment in pgs.
☒ Information Disclosure Statement; PTO-1449 w/ 7 Ref(s)
☐ Check for \$ Filing Fee
☐ Check for \$ for Assignment
☒ PCT FORMS: PCT/ISA/210, 227; PCT/IB/308
☒ Return Postcard
X AMENDMENTS TO THE CLAIMS OF
INTL APPL. UNDER PCT ARTICLE 19.
X CREDIT CARD INFO. SHEET.
X INFORMATION APPLICATION AS PUBLISHED. ARTICLE 19.
(WO 2004/084570A1)
X ENGLISH TRANSLATION OF CLAIM AMENDMENTS UNDER PCT

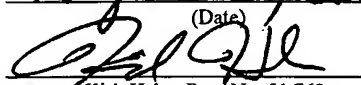
Exhibit D

Declaration from Kirk O. Hahn

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : YOSHIMURA, et al.
Appl. No. : 10/523,120
Filing Date : January 24, 2005
For : STATION
Examiner : Unknown
Group Art Unit : 2661

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

August 25, 2006
(Date)

Kirk Hahn, Reg. No. 51,763

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED

AUG 31 2006

OFFICE OF PETITIONS

Sir:

1. I, KIRK O. HAHN, declare as follows:
2. My address is 14431 Holt Avenue, Santa Ana, California, 92705 USA.
3. I am a Registered US Patent Agent with Registration Number 51,763.
4. On January 24, 2005, I filed by US Express Mail a National Phase Application with all documents necessary to receive a filing date. Additionally, enclosed was a Form PTO-2038 (Credit Card Payment Form) in the amount of \$1,000 to pay the Filing Fees and the standard statement for authorization to pay any additional fees. Approximately a week later the return postcard, enclosed with the application documents, was returned with an unofficial filing date of January 24, 2005 and Application Number 10/523,120.
5. I noticed after a few weeks the application was listed in Private PAIR.
6. I routinely checked Private PAIR two or more times a day to find out when changes occurred in the status of applications. In early June 2005, the status of the above application was changed to "Abandonment -- Inc. Application under Rule 53(b) - Filing Fee Paid".

7. I contacted the Customer Service at USPTO as soon as I found out that the application had been listed as “abandoned”. I was told that the fees may have not been paid, even though Private Pair listed the fees paid. I was told to FAX a letter to the USPTO and supply a new Credit Card Information Sheet for payment of the Filing Fee.

8. On June 18, 2005, a “Notice of Abandonment” was mailed to me indicating that the Filing Fee had not been paid due to a credit card declination.

9. On June 24, 2005, I faxed a new Form PTO-2038 in the amount of \$1,000 with the correct credit card information to pay the Filing Fees for a Large Entity. Again, I included the standard authorization statement.

10. A few days later, I checked by phone my credit card charges and found out that the Filing Fee for this application was charged to the credit card account on June 28, 2005.

11. On July 28, 2005, the USPTO mailed a notice stating that the faxed letter had been considered a Petition to Revive, the Petition had been granted, and the application was no longer abandoned.

12. The status in Private PAIR did not change after receiving the Notice of the Petition being Granted and the Application being revived. I continued to routinely check Private PAIR for changes in the status of the application.

13. After the mailing date of the Petition Notification, I did not receive any further notices [e.g., Missing Parts, Notice of Abandonment] from the USPTO concerning the above application. I am a sole practitioner and review all mail that arrives at my address. Mail from the USPTO is infrequent, so I notice when any notifications arrive from the Patent Office.

14. While checking Private PAIR in late April 2006, I noticed that the Bibliographic Data table listed the application’s location as “FILE REPOSITORY (FRANCONIA)” rather than “ELECTRONIC”. I contacted USPTO Customer Service and they retrieved the application from the repository. I was told the application had been Abandoned for failure to pay the Filing Fee.

15. Upon learning that the application had been “abandoned again, I re-read the Notice mailed on July 28, 2005 and I found out that I had misread the Notice. The Filing Fee actually had not been paid, since the \$1,000 charge to the credit card account had been refunded due to the new Form PTO-2038 being submitted by fax. It had been ruled that the faxed Form PTO-2038 was the actual “payment of fees” rather than what I thought was just a correction of the credit card information submitted with the original application.

16. I filed a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 C.F.R. § 1.137(b) by EFS as soon as I learned about the unpaid Filing Fee. Additionally, I paid \$1,500 for the petition fee and \$1,000 for the filing fee of a large entity National Phase application.

17. The petition was dismissed without prejudice. This current Renewed Petition under 37 C.F.R. § 1.137(b) is submitted to correct errors in the original Petition for Revival under 37 C.F.R. § 1.137(b).

18. I declare the failure to pay the filing fees has been unintentional for the entire period from September 17, 2005 to the filing of a grantable petition under 37 C.F.R. § 1.137(b).

18. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. Moreover, these statements were made with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: August 25, 2006



Kirk O. Hahn
Agent of Record
Registration No. 51,763
Customer Number 038051
714-544-2934

Exhibit E

Copy of Abandonment Letter

COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

| U.S. APPLICATION NUMBER NO. | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
|-----------------------------|-----------------------|------------------|
| 10/523,120 | Takashi Yoshimura | ASA-007 |

| | |
|-------------------------------|---------------|
| INTERNATIONAL APPLICATION NO. | |
| PCT/JP04/02756 | |
| I.A. FILING DATE | PRIORITY DATE |

38051
 KIRK HAHN
 14431 HOLT AVE
 SANTA ANA, CA 92705

CONFIRMATION NO. 5095

371
 ABANDONMENT/TERMINATION
 LETTER



OC000000016324222

Date Mailed: 06/20/2005

NOTIFICATION OF ABANDONMENT

The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

- Basic Filing Fees Not Paid Due to Credit Card Declinement

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495, and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

PATRICIA A BOOKER

Telephone: (703) 308-9140 EXT 204

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/909 (371 Abandonment Notice)

Exhibit F

Copy of faxed information to revive application

SBI

KIRK HAHN
14431 HOLT AVE
SANTA ANA CA 92705 - 3266Page 5 of 5
Account Number 714544-2934 311 7
Billing Date Jul 22, 2005

Questions? 1 888 478-8724

COPY

Important Information

This portion of your bill is provided as a service to the company identified above. Please review all charges appearing in this section. If you have any questions or concerns, call the telephone number shown above.

Current Charges

Itemized Charges and Credits

| No. | Date | Description | |
|--------|------|------------------------------------|------|
| 1.6-28 | | FEDERAL UNIVERSAL SERVICE FUND FEE | 1.27 |

Long Distance

| No. | Date | Time | Place Called | Number | Code | Min | |
|--|------|------|--------------|--------|------|-----|--|
| Billed on Behalf of LUCKY DOG PHONE CO | | | | | | | |
| Charges for 714 544-2934 | | | | | | | |

Itemized Calls

| | | | | | | | |
|---------|-------|--------------|--------------|--|---|------|------|
| 2.6-19 | 538P | MOBILE | 8 | | Y | 1.0 | .81 |
| 3.6-19 | 538P | 345JAPAN | | | Y | 2.0 | .79 |
| 4.6-19 | 600P | 345SONORAJCA | | | N | 12.0 | .90 |
| 5.6-21 | 1011P | 345AUSTRAL | | | Y | 1.0 | .67 |
| 6.6-24 | 959P | 345ALEXANDVA | 571 273-0459 | | N | 2.0 | .69 |
| 7.6-24 | 1002P | 345ALEXANDVA | 571 273-0459 | | N | 3.0 | .74 |
| 8.6-24 | 1005P | 345ALEXANDVA | 571 273-0459 | | N | 4.0 | .79 |
| 9.6-24 | 1011P | 345ALEXANDVA | 571 273-0419 | | N | 4.0 | .79 |
| 10.6-30 | 917P | 345JAPAN | | | Y | 1.0 | .69 |
| 11.6-30 | 951P | 345JAPAN | | | Y | 4.0 | .99 |
| 12.7-01 | 316P | 345SAN DIECA | | | N | 1.0 | .35 |
| 13.7-01 | 320P | 345LA JOLICA | | | N | 1.0 | .35 |
| 14.7-01 | 842P | 345JAPAN | | | Y | 28.0 | 3.39 |
| 15.7-04 | 607P | 345ROCKFORIL | | | N | 1.0 | .64 |
| 16.7-04 | 631P | 345SONORAJCA | | | N | 11.0 | .85 |
| 17.7-05 | 934A | 345ROCKFORIL | | | N | 68.0 | 3.99 |
| 18.7-06 | 718P | 345JAPAN | | | Y | 3.0 | .89 |
| 19.7-07 | 1035P | 345AUSTRAL | | | Y | 1.0 | .67 |
| 20.7-08 | 713A | 345AUSTRAL | | | Y | 1.0 | .67 |
| 21.7-08 | 715A | 345AUSTRAL | | | Y | 1.0 | .67 |
| 22.7-08 | 717A | 345AUSTRAL | | | Y | 2.0 | .75 |
| 23.7-09 | 450P | MOBILE | | | Y | 28.0 | 6.97 |
| 24.7-09 | 520P | MOBILE | | | Y | 3.0 | 1.25 |
| 25.7-10 | 126A | 345JAPAN | | | Y | 22.0 | 2.79 |
| 26.7-13 | 730P | 345SONORAJCA | | | N | 8.0 | .70 |
| 27.7-18 | 609A | 345UK | | | Y | 1.0 | .66 |

Long Distance - Continued

| No. | Date | Time | Place Called | Number | Code | Min | |
|--------------------------------|------|-------|--------------|--------------|------|-----|-------|
| 28.7-18 | 612A | 345UK | | 441925655153 | Y | 1.0 | .66 |
| Total Itemized Calls | | | | | | | 34.11 |
| Total Charges for 714 544-2934 | | | | | | | 34.11 |
| Total LUCKY DOG PHONE CO | | | | | | | 34.11 |
| Total Long Distance | | | | | | | 34.11 |

Government Fees and Taxes

| | |
|--|------|
| 29. CA High Cost Fund Surcharge - B: | .08 |
| 30. California Teleconnect Fund Surcharge | .01 |
| 31. Universal Lifeline Telephone Service Surcharge | .05 |
| 32. CA Relay Service and Communications Devices Fund | .01 |
| 33. 9-1-1 Emergency System | .02 |
| 34. Federal | 1.03 |
| Total Government Fees and Taxes | 1.20 |

Key to Calling Codes

N Night/Weekend Y Economy

Total USBI Current Charges 36.58

Fax

COPY

| | |
|----------------------|---------------------|
| To: PCT Legal Office | From: Kirk Hahn |
| Fax: 571-273-0459 | Fax: 714-544-2934 |
| Phone: | Phone: 714-544-2934 |

| | |
|-------------------------------|-------------------------------------|
| Date: 6/24/2005 | Pages: 6, including this cover page |
| Subject: Improper Abandonment | |

Comments:

Dear Sir:

I noticed on my Private PAIR site that the below National Phase application had been marked "abandoned". The information indicates that the "filing fee paid". I believe I submitted a complete application with payment by credit card.

I called your office and the person told me that there was a possibility that the application fee had not been paid even though the site indicated that the fee had been paid. The person told me to send a FAX to the PCT Legal Office to correct this mistake by the USPTO.

I am faxing with this cover letter, copies of the Transmittal Letter, Certificate of Mailing, Return Postcard with Date Stamp and Application Number, and a new Credit Card Payment Form with authorization to pay the proper filing fee for this application.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Credit Card.

Applicant: YOSHIMURA, et al.

App. No.: 10/523120

Filing Date: January 24, 2004

Title : STATION



Kirk Hahn

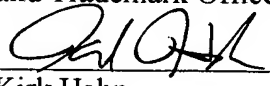
Registration No. 51,763

Agent of Record

Customer No. 038,051

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office (Fax No. 571-273-0459) on June 24, 2005

 6/24/2005
Kirk Hahn

COPY

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

Attorney Docket No. : ASA-007
Applicant(s) : Takashi YOSHIMURA
Toshihisa TODE
Syozo TAMAKI
For : STATION
Agent : Kirk Hahn
"Express Mail"
Mailing Label No. : EU 824597103 US
Date of Deposit : January 24, 2005

I hereby certify that the accompanying

Transmittal Letter (with preliminary amendment) in 3 pages; Specification in 32 pages; An English translation of claim amendments under PCT Article 19; A Declaration signed by the inventors in 3 pages; 4 Sheets of Drawings; Power of Attorney form and copy of assignment in 3 pages; Information Disclosure Statement and PTO-1449 in 1 total page (IDS and 1449); seven (7) references; PCT Forms: PCT/ISA/237, PCT/IB/308, PCT/ISA/210; International Application As Published (WO 2004/084570 A1); A credit card information sheet in the amount of \$1,000; and Return prepaid postcard

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Kirk Hahn

**NATIONAL PHASE
UTILITY APPLICATION**

Attorney Docket No.: ASA-007
First Named Inventor: Takashi YOSHIMURA
Int'l Application No.: PCT/JP2004/002756
Title: STATION
Express Mail Label No.: EU 824597103 US

COPY

Direct all correspondence to Customer No.: 038051

Date: January 24, 2005
Page 1 of 2

Mail Stop PCT
United States Patent and Trademark Office
P.O. Box 1450
Alexandria VA 22313-1450

The following enclosures are transmitted herewith to be filed in the patent application of:

Inventors:

1. Takashi YOSHIMURA
2. Toshihisa TODE
3. Syozo TAMAKI

APPLICATION ELEMENTS:

- (X) This is a FIRST submission of items concerning a filing under 35 U.S.C. § 371.
- (X) The U.S. has been elected (Article 31).
- (X) A copy of the International Application as filed (35 U.S.C. § 371(c)(2)) has been communicated by the International Bureau.
- (X) An English translation of the International Application as filed is attached hereto.
- (X) Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. § 371(c)(3)) are attached hereto.
- (X) An English translation of claim amendments under PCT Article 19 (35 U.S.C. § 371(c)(3)).
- (X) An Oath or Declaration signed by the inventors in 3 pages (35 U.S.C. § 371(c)(4)).

OTHER APPLICATION PARTS:

- (X) 4 Sheets of Drawings.
- (X) Preliminary Amendment: Attached to the Transmittal Letter.
- (X) Power of Attorney form and copy of assignment in 3 pages.
- (X) Information Disclosure Statement and PTO-1449 in 1 total page (IDS and 1449).
 - (X) seven (7) references
- (X) PCT Forms: PCT/ISA/237, PCT/IB/308, PCT/ISA/210
- (X) International Application As Published (WO 2004/084570 A1).
- (X) Return prepaid postcard.

COPY

**NATIONAL PHASE
UTILITY APPLICATION**

Attorney Docket No.: ASA-007
 First Named Inventor: Takashi YOSHIMURA
 Int'l Application No.: PCT/JP2004/002756
 Title: STATION
 Express Mail Label No.: EU 824597103 US

Direct all correspondence to Customer No.: 038051

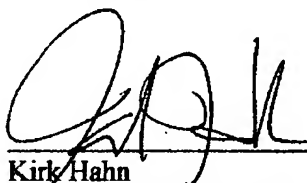
Date: January 24, 2005
 Page 2 of 2

FILING FEES:

| FEE CALCULATION | | | | |
|--------------------------------|--------------|------------|----------------------|----------------|
| FEE TYPE | | FEE | CALCULATION | TOTAL |
| Basic National Stage Fee | | 300 | | \$300 |
| Excess Claims > 20 | 16 - 20 = 0 | 50 | | 0 |
| Independent > 3 | 2 - 3 = 0 | 200 | | 0 |
| National Stage Search Fee | | 500 | | \$500 |
| National Stage Examination Fee | | 200 | | \$200 |
| Total Pages | 37 - 100 = 0 | 250 | | 0 |
| | | | TOTAL FEE DUE | \$1,000 |

(X) A credit card information sheet in the amount of \$1,000.

The Commissioner is hereby authorized to charge any additional fees which may be required, now or in the future, or credit any overpayment to the credit card number indicated in the credit card information sheet..



Kirk Hahn
 Registration No. 51,763
 Agent of Record
 Customer No. 038,051

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

United States Patent and Trademark Office

COPY

Credit Card Payment Form

Please Read Instructions before Completing this Form

Credit Card Information

Credit Card Type: ☐ Visa ☐ MasterCard ☒ American Express ☐ Discover

Credit Card Account #: [REDACTED]

Credit Card Expiration Date: 09/05

Name as it Appears on Credit Card: KIRK HAHN

Payment Amount: \$ (US Dollars): \$1,000.00

Cardholder Signature: [Signature]

Date: JUNE 24, 2005

Refund Policy: The Office may refund a fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The office will not refund amounts of \$25.00 or less unless a refund is specifically requested, and will not notify the payor of such amounts (37 CFR § 1.26). Refund of a fee paid by credit card will be issued as a credit to the credit card account to which the fee was charged.

Service Charge: There is a \$50.00 service charge for processing each payment refused (including a check returned "unpaid") or charged back by a financial institution (37 CFR § 1.21 (m)).

Credit Card Billing Address

Street Address 1: 14431 HOLT AVENUE

Street Address 2:

City: SANTA ANA

State/Province: CALIFORNIA

Zip/Postal Code: 92705

Country: USA

Daytime Phone #: 714-544-2934

Fax #: 714-544-2934

Request and Payment Information

Description of Request and Payment Information:

NATIONAL PHASE APPLICATION

☒ Patent Fee

☐ Patent Maintenance Fee

☐ Trademark Fee

☐ Other Fee

Application No.

Application No.

Application No.

IDON Customer No.

Patent No.

Patent No.

Registration No.

Attorney Docket No.

ASA-007

Identify or Describe Mark

If the cardholder includes a credit card number on any form or document other than the Credit Card Payment Form, the United States Patent and Trademark Office will not be liable in the event that the credit card number becomes public

SENDING REPORT

COPY

Jun. 24 2005 10:12PM

YOUR LOGO : HAHN & KIMOSHITA
YOUR FAX NO. : 714-544-2934

| NO. | OTHER FACSIMILE | START TIME | USAGE TIME | MODE | PAGES | RESULT |
|-----|--------------------|-----------------|------------|------|-------|--------|
| 01 | 101034515712730459 | Jun. 24 10:08PM | 03'30 | SND | 06 | OK |

TO TURN OFF REPORT, PRESS 'MENU' #04.
THEN SELECT OFF BY USING '+' OR '-'.
FAX

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

SENDING REPORT

COPY

Jun. 24 2005 10:17PM

YOUR LOGO : HAHN & KIMOSHIYA
YOUR FAX NO. : 714-544-2934

| NO. | OTHER FACSIMILE | START TIME | USAGE TIME | MODE | PAGES | RESULT |
|-----|--------------------|-----------------|------------|------|-------|--------|
| 01 | 101034515712730419 | Jun. 24 10:14PM | 03'33 | SND | 06 | OK |

TO TURN OFF REPORT, PRESS 'MENU' #04.
THEN SELECT OFF BY USING '+' OR '-'.

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

Exhibit G

Copy of credit card bill



Prepared For
KIRK HAHN

Account Number
XXXX-XXXXX0-01002

COPY

ST. HERTZ
INTERNATIONAL
FEDER - GROUPING
AT&T - LOCAL AND LONG
BUSINESS CALLING P
Program

Due In Full continued

| | | |
|----------|---|----|
| 06/21/05 | US PATENT TRADEMARK 703-3054631 WWW.USPTO.GOV | VA |
| 06/24/05 | RUSTY PELICAN #05 NEWPORT BEACH FOOD/BEVERAGE FOOD/BEV TIP | CA |
| 06/28/05 | USPS [REDACTED] IRVINE POSTAL SERVICES | CA |
| 06/28/05 | COSTCO WHSE [REDACTED] GROCERY STORE/SUPERMRKT ROC No. [REDACTED] | CA |
| 06/28/05 | US PATENT TRADEMARK 703-3054631 WWW.USPTO.GOV ROC No. [REDACTED] | VA |

1,000.00

Total of Due In Full Activity for KIRK HAHN

Due In Full Activity for [REDACTED]

Card XXXX-XXXXX0-01010

| | | |
|----------|--|----|
| 06/03/05 | SAM WOO SEAFOOD RESTIRVINE FOOD & BEVERAGE ROC No. 0000000000 | CA |
| 06/04/05 | KINKO'S INC: 0313 Tustin 92780- | CA |
| 06/04/05 | TUSTIN RANCH CLEANERTUSTIN LAUNDRY/CLEANING SRVC | CA |
| 06/04/05 | COSTCO WHSE #00 0991 TUSTIN GROCERY STORE/SUPERMRKT ROC No. [REDACTED] | CA |
| 06/05/05 | KINKOS 0313 TUSTIN SELF-SERVE WORK ES B&W S/S WHITE 8.5 X11 ADDITIONAL PURCHASES - REFER TO INVOICE ROC No. [REDACTED] | CA |
| 06/05/05 | KINKO'S INC: 0313 Tustin 92780- | CA |
| 06/05/05 | AARON BROTHERS #027 TRUSTIN VARIETY STORE | CA |
| 06/06/05 | USPS [REDACTED] SANTA ANA POSTAL SERVICES | CA |
| 06/11/05 | SHINE & BRITE HAND CCULVER CITY CAR WASH | CA |
| 06/12/05 | OFFICE DEPOT, INC. TUSTIN OFFICE PROD. & SUPPLIES STICKERS, JOLEES DISNEY, ASTD ROC No. [REDACTED] | CA |
| 06/12/05 | AARON BROTHERS #027 TRUSTIN VARIETY STORE | CA |
| 06/13/05 | KINKOS 0313 TUSTIN SELF-SERVE WORK ES COLOR S/S LTR ES B&W S/S WHITE 11X17 ES B&W S/S WHITE 8.5 X11 ADDITIONAL PURCHASES - REFER TO INVOICE ROC No. [REDACTED] | CA |
| 06/14/05 | USPS [REDACTED] SANTA ANA POSTAL SERVICES | CA |

Continued on reverse

Exhibit H

Copy of Petition Decision – Granted

28 JUL 2005



COPY

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

Kirk Hahn
14431 HOLT AVENUE
SANTA ANA, CA 92705

In re Application of YOSHIMURA et al.
Application No.: 10/523,120
PCT Application No.: PCT/JP04/02756
Int. Filing Date: 04 March 2004
Priority Date Claimed: 17 March 2003
Attorney Docket No.: ASA-007
For: STATION

DECISION ON
PETITION UNDER
37 CFR 1.181

This decision is in response to applicants' "Facsimile Response" filed in the United States Patent and Trademark Office on 24 June 2005 which has been treated as a petition under 37 CFR 1.181 to withdraw the holding of abandonment. The petition is **GRANTED**. However, for reasons below, applicants have not yet forwarded the required basic national fee.

BACKGROUND

On 04 March 2004, applicants filed international application PCT/JP04/02756 designating the United States. The international application claims priority date of 17 March 2003. The deadline for paying the basic national fee in the United States is thirty months from the priority date, that is 17 September 2005.

On 24 January 2005, applicants filed a transmittal letter for entry into the U.S. national stage under 35 U.S.C. 371, which was accompanied by, *inter alia*, a copy of the international application as required by 35 U.S.C. 371(c)(2), an executed declaration as required by 35 U.S.C. 371(c)(4), and authorization to charge the basic national fee of \$1000 to applicants' credit card. The credit card was declined, and thus the basic national fee was not paid.

COPY

On 20 June 2005, a Notification of Abandonment (Form PCT/DO/EO/909) was mailed to applicants, indicating that the basic national fee was not paid due to credit card being declined.

On 24 June 2005, applicants filed the instant facsimile response accompanied by, *inter alia*, a new credit card payment form for the requisite basic national fee as required by 35 U.S.C. 371(c)(1).

DISCUSSION

§ 37 C.F.R. 1.6, **Receipt of correspondence**, states, in part:

“(d) *Facsimile transmission*. Except in the cases enumerated below, correspondence, including authorizations to charge a deposit account, may be transmitted by facsimile. The receipt ... cover sheet. Facsimile transmission are not permitted and, if submitted will not be accorded a date of receipt in the following situation:

(3) Correspondence which cannot receive the benefit of the certification of mailing or transmission as specified in § 1.8(a)(2)(i)(A) through (D) and (F), and § 1.8(a)(2)(iii)(A), except that a continued prosecution application under § 1.53(d) may be transmitted to the Office by facsimile.”

§ 37 C.F.R. 1.8, **Certificate of mailing or transmission**, states, in part:

“(a) Except in the situations enumerated in paragraph (a)(2) of this section as otherwise expressly excluded in this chapter, correspondence required to be filed in the U.S. Patent and Trademark Office within a set period of time will be considered as being timely filed if the procedure described in this section is followed. The actual date of receipt will be used for all other purposes.

(2) The procedure described in paragraph (a)(1) of this section does not apply to, and no benefit will be given to a Certificate of Mailing or Transmission on, the following:

(i) Relative to Patents and Patent Applications

(F) The filing of a copy of the international application and the basic national fee necessary to enter the national stage, as specified in § 1.495(b).”

§ 37 C.F.R. 1.495, **Entering the national stage in the United States of America**, states, in part:

“(b) To avoid abandonment of the application, the applicant shall furnish the United States Patent and Trademark Office not later than the expiration of thirty months from the priority date:

COPY

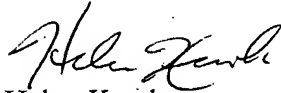
(2) The basic national fee (see § 1.492(a)).”

Accordingly, with regards to § 37 C.F.R. 1.8(a)(2)(i)(F), the required basic national fee has not been paid. Thus, applicants have not met the requirements under 35 U.S.C. 371(c)(1) for the reasons discussed above. Furthermore, according to 37 CFR 1.495, the Notification of Abandonment (Form PCT/DO/EO/909) was inadvertently mailed since the deadline to meet the requirements for entering into the national stage in the United States is thirty months from the priority date, that is 17 September 2005. Payment submitted by credit card authorization faxed 24 June 2005 has been credited back to such credit card.

CONCLUSION

For the reasons discussed above, the petition under 37 CFR 1.181 is GRANTED. However, applicants have not submitted the basic national fee as required under 35 USC 371 1.371(c)(1). To avoid abandonment, applicants must furnish such fee prior to the expiration of 30 months from the priority date. See 37 CFR 1.495(b).

The application is being returned to the Office of PCT Operations to await receipt of the payment of the basic national fee.



Helen Kwok
PCT Legal Administration Detailee
Telephone: 571-272-6095
Facsimile: 571-273-0459



Boris Milef
PCT Legal Examiner
Office of PCT Legal Administration

Exhibit I

Copy of Petition to Revive “as filed”

COPY

PTO/SB/64 (10-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)**Docket Number (Optional)
ASA-007**RECEIVED****AUG 31 2006****OFFICE OF PETITIONS**

First named inventor: YOSHIMURA, Takashi

Application No.: 10/523,120

Art Unit: 2661

Filed: January 24, 2005

Examiner: Unknown

Title: Station

Attention: Office of Petitions

Mail Stop Petition

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

FAX (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus an extensions of time actually obtained.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee☐ Small entity-fee \$ _____ (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.☒ Other than small entity - fee \$ \$1,500 (37 CFR 1.17(m))**2. Reply and/or fee**

A. The reply and/or fee to the above-noted Office action in the form of _____ (identify type of reply):

- ☐ has been filed previously on _____.
- ☐ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of \$ _____.

- ☐ has been paid previously on _____.
- ☐ is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

COPY

PTO/SB/64 (10-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

3. Terminal disclaimer with disclaimer fee

☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.

☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ _____ for a small entity or \$ _____ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

/KOH/
Signature

May 3, 2006
Date

KIRK HAHN
Typed or printed name

51,763
Registration Number, if applicable

14431 HOLT AVENUE
Address

714-544-2934
Telephone Number

SANTA ANA, CA 92705
Address

Enclosures: ☒ Fee Payment

☐ Reply

☐ Terminal Disclaimer Form

☒ Additional sheets containing statements establishing unintentional delay

☐ Other: _____

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

☐ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office as (571) 273-8300.

Date

Signature

Typed or printed name of person signing certificate

COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : YOSHIMURA, Takashi
App. No. : 10/523,120
Filing Date : January 24, 2005
For : Station
Examiner : Unknown

Group Art Unit Unknown

RECEIVED

AUG 31 2006

OFFICE OF PETITIONS

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONEDUNINTENTIONALLY UNDER 37 CFR 1.137(b)STATEMENT IN SUPPORT OF PETITION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The prosecution history of this application is short, but complicated. This is the second time the application has been declared abandoned in less than a year.

The application is an U.S. National Stage under 35 USC 371 submission from a Japanese PCT application. The application was filed by EXPRESS MAIL (this fact becomes important later in the discussion) and payment was authorized by a Credit Card Information sheet. The transmittal letter accompanying the application contained a calculation of the USPTO filing fees and included the standard statement for authorization to pay any additional fees.

"The Commissioner is hereby authorized to charge any additional fees which may be required, now or in the future, or credit any overpayment to my credit card."

A few days after mailing the application, I received the Return Postcard with the filing date and application number. In due course, the application was available in Private Pair. The Application Data showed "Fees Paid".

In early June 2005, while checking my applications in Private Pair, I noticed that the status of the application had been changed to "Abandoned". I contacted USPTO Customer Service and was told that the fees may have not been paid, even though Private Pair listed the fees paid. The person could not understand why the fees were not paid because the application contained the standard authorization statement. I was told to FAX a letter to the appropriate office at the USPTO and supply a new Credit Card Information Sheet for payment of the Filing Fee. Again, I included the standard authorization statement.

Upon checking my Credit Card statement by phone, the Filing Fee for this application was charged to my account on June 24, 2005. I thought everything had been solved.

Near the end of July 2005, I received a document from the USPTO stating that my FAX letter had been considered a Petition to Revive, the Petition had been granted, and the application was no longer abandoned. I read the document but the language was very confusing. All I knew was that the filing fee had been paid and the application was no longer abandoned. The status remained listed as abandoned; however, I considered it just an oversight by the USPTO and the status would be up-dated. I began the long wait for the application to reach the stage for examination.

Recently, I noticed that the application's location was listed as "FILE REPOSITORY (FRANCONIA)" rather than "ELECTRONIC". I again contacted the USPTO Customer Service and they retrieved the application from the repository. I was informed that the application had been Abandoned for failure to pay the Filing Fee.

The document I received in July, upon careful reading and examining several passages in the MPEP, stated that the Filing Fee had been paid, but the USPTO had returned the money to my credit card account because "payment was made by FAX", and I was suppose to re-pay the filing fees. When the filing fees had not been re-paid by September, the application was abandoned again.

There are two important issues concerning my attempts to pay the Filing Fee.

1. The original application package contained a Transmittal Letter with the standard statement giving Authorization to the USPTO to charge any extra fees to my Credit Card and the USPTO form – Credit Card Information Sheet. If there were any problems with payment of the filing fee, the USPTO had the proper information to charge my account the correct amount. This

fact is evident from the many occasions the USPTO has either charged extra fees or refunded excess payments, as is desired by the authorization. The USPTO was authorized to pay the Filing Fee at any time during the entire period of the application pendency.

Therefore, the USPTO should have automatically charged my Credit Card account upon deciding for the first time that the fees had not been properly paid. Additionally, when the Filing Fee was paid in June, the application was complete with all fees paid. It was only the actions by the USPTO that caused the application to be considered abandoned.

2. The application was filed by EXPRESS MAIL and the Credit Card Information Sheet was enclosed in the application package. The USPTO should not have refunded the Filing Fee, after it had been properly charged to my credit card account, then to require me to re-pay the Filing Fee by having the USPTO charge the same credit card account.

The conclusion that I had paid the filing fee by "FAX" was erroneous. The FAX in June 2005 contained the Credit Card Information and my signature, so the USPTO department that processes the fee had the correct information in case the previous Credit Card Information Sheet had been discarded. I was just furnishing information that had already been sent to the USPTO by mail.

Conclusion

Included with this petition is payment of the Filing Fee for this application. Additionally, I have paid the Petition Fee of \$1,500; however, I believe the petition fee should be refunded since it was the actions of the USPTO personnel to ignore the Payment Authorization Statement in the Transmittal Letter that caused the Filing Fees not to be paid. The Filing Fee should have been paid in January 2005 and, after the fee had been paid in June, should have remained paid rather than refunding the fee just to have me pay it again.

It is understandable that errors can occur during the processing of an application. However, I should not be held responsible to pay a high Petition fee to reverse actions not under my control.

The application was never meant to be abandoned and, the entire time from the filing of the application to the present, the abandonment was unintentional.

All fees are believed paid by the electronic payment system; however, the Commissioner is hereby authorized to charge any additional fees which may be required, now or in the future, or credit any overpayment to my credit card.

Date: May 3, 2006

/KOH/
Kirk Hahn
Agent of Record
Registration No. 51,763
Customer Number 038051
714-544-2934

COPY

Electronic Patent Application Fee Transmittal

| | | | | |
|--|-------------------|----------|--------|----------------------|
| Application Number: | 10523120 | | | |
| Filing Date: | | | | |
| Title of Invention: | Station | | | |
| First Named Inventor: | Takashi Yoshimura | | | |
| Filer: | Kirk Otto Hahn | | | |
| Attorney Docket Number: | ASA-007 | | | |
| Filed as Large Entity | | | | |
| U.S. National Stage under 35 USC 371 Filing Fees | | | | |
| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
| Basic Filing: | | | | |
| National Stage Fee | 1631 | 1 | 300 | 300 |
| National Stage Search - all other cases | 1632 | 1 | 500 | 500 |
| National Stage Exam - all other cases | 1633 | 1 | 200 | 200 |
| Pages: | | | | |
| Claims: | | | | |
| Miscellaneous-Filing: | | | | |
| Petition: | | | | |
| Petition-revive unintention. abandoned appl | 1453 | 1 | 1500 | 1500 |

| Description | COPY Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|-----------------------------------|------------------|----------|--------|-------------------------|
| Patent-Appeals-and-Interference: | | | | |
| Post-Allowance-and-Post-Issuance: | | | | |
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| Total in USD (\$) | | | | 2500 |

Electronic Acknowledgement Receipt

COPY

| | |
|--|--------------------------------------|
| EFS ID: | 1038178 |
| Application Number: | 10523120 |
| Confirmation Number: | 5095 |
| Title of Invention: | Station |
| First Named Inventor: | Takashi Yoshimura |
| Customer Number: | 38051 |
| Filer: | Kirk Otto Hahn |
| Filer Authorized By: | |
| Attorney Docket Number: | ASA-007 |
| Receipt Date: | 03-MAY-2006 |
| Filing Date: | |
| Time Stamp: | 23:51:01 |
| Application Type: | U.S. National Stage under 35 USC 371 |
| International Application Number: | |

Payment information:

| | |
|--|----------|
| Submitted with Payment | yes |
| Payment was successfully received in RAM | \$2500.0 |
| RAM confirmation Number | 379 |
| Deposit Account | |

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes) | Multi Part | Pages |
|-----------------|----------------------|-----------|------------------|------------|-------|
|-----------------|----------------------|-----------|------------------|------------|-------|

COPY

| | | | | | |
|---|---|------------------------------|--------|----|---|
| 1 | Petition for review by the Office of Petitions. | ASA007-PETITION-FOEM.pdf | 212433 | no | 3 |
| Warnings: | | | | | |
| Information: | | | | | |
| 2 | Miscellaneous Incoming Letter | DI009-petition-statement.pdf | 34766 | no | 4 |
| Warnings: | | | | | |
| Information: | | | | | |
| 3 | Fee Worksheet (PTO-875) | fee-info.pdf | 8464 | no | 2 |
| Warnings: | | | | | |
| Information: | | | | | |
| Total Files Size (in bytes): | | | 255663 | | |
| <p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> | | | | | |

Exhibit J

Copy of Petition Decision – Dismissed without Prejudice



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

COPY

JGJR.: 07-06

Paper No: __

KIRK HAHN
14431 HOLT AVE
SANTA ANA CA 92705

COPY MAILED

JUL 1 0 2006

OFFICE OF PETITIONS

In re Application of
Yoshimura
Application No.: 10/523,120
Filing Date: 24 January, 2005
Attorney Docket No. ASA-007

DECISION

This is a decision on the petition filed on 3 May, 2006, to revive under 37 C.F.R. §1.137(b) as having been abandoned due to unintentional delay.

For the reasons set forth below the petition under 37 C.F.R. §1.137(b) is **DISMISSED without prejudice.**

NOTES:

- (1) Any petition (and fee) for reconsideration of this decision must be submitted within two (2) months from the mail date of this decision. Extensions of time under 37 C.F.R. §1.136(a) are permitted. The reconsideration request should include a cover letter entitled "Renewed Petition under 37 C.F.R. §1.137(b)."
- (2) Thereafter, there will be no further reconsideration of this matter.

BACKGROUND

The record reflects that:

- from the limited record—at this writing only a minimal Image File Wrapper (IFW) is available and a file has been ordered from the Repository but not received—it appears that Petitioner failed to reply timely and properly to a fees requirement (the Notice of Missing Parts), and while the mail date and reply due dates also are unclear, by 18 June, 2005, the file had been declared abandoned;
- the instant petition, filed on 3 May, 2006, goes through an extensive narrative, but provides no documents in support of the allegations—Petitioner is reminded that all practice before the Office is in writing (see: under 37 C.F.R. §1.2¹) and each matter must be in a separate paper (see: under 37 C.F.R. §1.4²);

¹ The regulations at 37 C.F.R. §1.2 provide:

§1.2 Business to be transacted in writing.

All business with the Patent and Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

² The regulations at 37 C.F.R. §1.4 provide:

§1.4 Nature of correspondence and signature requirements.

(a) Correspondence with the Patent and Trademark Office comprises:

(1) Correspondence relating to services and facilities of the Office, such as general inquiries, requests for publications supplied by the Office, orders for printed copies of patents or trademark registrations, orders for copies of records, transmission of assignments for recording, and the like, and

(2) Correspondence in and relating to a particular application or other proceeding in the Office.

See particularly the rules relating to the filing, processing, or other proceedings of national applications in subpart B, §§ 1.31 to 1.378; of international applications in subpart C, §§ 1.401 to 1.499; of *ex parte* reexaminations of patents in subpart D, §§ 1.501 to 1.570; of interferences in subpart E, §§ 1.601 to 1.690; of extension of patent term in subpart F, §§ 1.710 to 1.785; of *inter partes* reexaminations of patents in subpart H, §§ 1.902 to 1.997; and of trademark applications §§ 2.11 to 2.189.

(b) Since each file must be complete in itself, a separate copy of every paper to be filed in a patent or trademark application, patent file, trademark registration file, or other proceeding must be furnished for each file to which the paper pertains, even though the contents of the papers filed in two or more files may be identical. The filing of duplicate copies of correspondence in the file of an application, patent, trademark registration file, or other proceeding should be avoided, except in situations in which the Office requires the filing of duplicate copies. The Office may dispose of duplicate copies of correspondence in the file of an application, patent, trademark registration file, or other proceeding.

(c) Since different matters may be considered by different branches or sections of the United States Patent and Trademark Office, each distinct subject, inquiry or order must be contained in a separate paper to avoid confusion and delay in answering papers dealing with different subjects.

(d)(1) Each piece of correspondence, except as provided in paragraphs (e) and (f) of this section, filed in an application, patent file, trademark registration file, or other proceeding in the Office which requires a person's signature, must:

(i) Be an original, that is, have an original signature personally signed in permanent ink by that person; or

(ii) Be a direct or indirect copy, such as a photocopy or facsimile transmission (§ 1.6(d)), of an original. In the event that a copy of the original is filed, the original should be retained as evidence of authenticity. If a question of authenticity arises, the Office may require submission of the original; or

(iii) Where an electronically transmitted trademark filing is permitted, the person who signs the filing must either

(A) Place a symbol comprised of numbers and/or letters between two forward slash marks in the signature block on the electronic submission;

and print, sign and date in permanent ink, and maintain a paper copy of the electronic submission; or

(B) Sign the verified statement using some other form of electronic signature specified by the Commissioner.

(2) The presentation to the Office (whether by signing, filing, submitting, or later advocating) of any paper by a party, whether a practitioner or non-practitioner, constitutes a certification under § 10.18(b) of this chapter. Violations of § 10.18(b)(2) of this chapter by a party, whether a practitioner or non-practitioner, may result in the imposition of sanctions under § 10.18(c) of this chapter. Any practitioner violating § 10.18(b) may also be subject to disciplinary action. See

- out of an abundance of caution, Petitioners always are reminded that those registered to practice *and* all others who make representations before the Office are reminded to inquire into the underlying facts of representations made to the Office and support averments with the appropriate documentation—since all owe to the Office the continuing duty to disclose.³

§§10.18(d) and 10.23(c)(15).

(e)Correspondence requiring person's signature and relating to registration practice before the

Patent and Trademark Office in patent cases, enrollment and disciplinary investigations, or disciplinary proceedings must be submitted with an original signature personally signed in permanent ink by that person.

(f)When a document that is required by statute to be certified must be filed, a copy, including a photocopy or facsimile transmission, of the certification is not acceptable.

(g)An applicant who has not made of record a registered attorney or agent may be required to state whether assistance was received in the preparation or prosecution of the patent application, for which any compensation or consideration was given or charged, and if so, to disclose the name or names of the person or persons providing such assistance. Assistance includes the preparation for the applicant of the specification and amendments or other papers to be filed in the Patent and Trademark Office, as well as other assistance in such matters, but does not include merely making drawings by draftsmen or stenographic services in typing papers. [24 FR 10332, Dec. 22, 1959; 43 FR 20461, May 11, 1978; para. (a), 48 FR 2707, Jan. 20, 1983, effective Feb. 27, 1983; para. (a), 49 FR 48416, Dec. 12, 1984, effective Feb. 11, 1985; para. (a)(2), 53 FR 47807, Nov. 28, 1988, effective Jan. 1, 1989; paras. (d)-(f) added, 58 FR 54494, Oct. 22, 1993, effective Nov. 22, 1993; para. (d) revised & para. (g) added, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997; paras. (a)(2) and (d)(1) revised, 64 FR 48900, Sept. 8, 1999, effective Oct. 30, 1999; paras. (b) and (c) revised, 65 FR 54604, Sept. 8, 2000, effective Nov. 7, 2000; para. (a)(2) revised, 65 FR 76756, Dec. 7, 2000, effective Feb. 5, 2001; para. (d)(1)(iii)(A) amended, 67 FR 79520, Dec. 30, 2002, effective Dec. 30, 2002.]

³ See supplement of 17 June, 1999. The Patent and Trademark Office is relying on petitioner's duty of candor and good faith and accepting a statement made by Petitioner. See Changes to Patent Practice and Procedure, 62 Fed. Reg. at 53160 and 53178, 1203 Off. Gaz. Pat. Office at 88 and 103 (responses to comments 64 and 109)(applicant obligated under 37 C.F.R. §10.18 to inquire into the underlying facts and circumstances when providing statements to the Patent and Trademark Office).

Specifically, the regulations at 37 C.F.R. §10.18 provide:

§ 10.18 Signature and certificate for correspondence filed in the Patent and Trademark Office.

(a) For all documents filed in the Office in patent, trademark, and other non-patent matters, except for correspondence that is required to be signed by the applicant or party, each piece of correspondence filed by a practitioner in the Patent and Trademark Office must bear a signature by such practitioner complying with the provisions of §1.4(d), §1.4(e), or § 2.193(c)(1) of this chapter.

(b) By presenting to the Office (whether by signing, filing, submitting, or later advocating) any paper, the party presenting such paper, whether a practitioner or non-practitioner, is certifying that—

(1) All statements made therein of the party's own knowledge are true, all statements made therein on information and belief are believed to be true, and all statements made therein are made with the knowledge that whoever, in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom; and

(2) To the best of the party's knowledge, information and belief, formed after an inquiry reasonable under the circumstances, that —
(i) The paper is not being presented for any improper purpose, such as to harass someone or to cause unnecessary delay or needless increase in the cost of prosecution before the Office;

(ii) The claims and other legal contentions therein are warranted by existing law or by a nonfrivolous argument for the extension, modification, or reversal of existing law or the establishment of new law;

(iii) The allegations and other factual contentions have evidentiary support or, if specifically so identified, are likely to have evidentiary support after a reasonable opportunity for further investigation or discovery; and

(iv) The denials of factual contentions are warranted on the evidence, or if specifically so identified, are reasonably based on a lack of information or belief.

(c) Violations of paragraph (b)(1) of this section by a practitioner or non-practitioner may jeopardize the validity of the application or document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom. Violations of any of paragraphs (b)(2)(i) through (iv) of this section are, after notice and reasonable opportunity to respond, subject to such sanctions as deemed appropriate by the Commissioner, or the Commissioner's designee, which may include, but are not limited to, any combination of —

(1) Holding certain facts to have been established;

Moreover, Petitioner is directed to the commentary set forth at MPEP §711.03(c), and reminded that frequent monitoring of one's applications on Private PAIR can inform one's case management. Timely action in a matter is required under the rules—e.g., 37 C.F.R. §1.181.

And it is noted that Petitioner may wish to plead the matter alternatively as a request to withdraw the holding of abandonment to be considered under 37 C.F.R. §1.181.

STATUTES, REGULATIONS AND ANALYSIS

Congress has authorized the Commissioner to "revive an application if the delay is shown to the satisfaction of the Commissioner to have been "unavoidable." 35 U.S.C. §133 (1994).⁴

The regulations at 37 C.F.R. §1.137(a) and (b) set forth the requirements for a petitioner to revive a previously unavoidably or unintentionally, respectively, abandoned application under this congressional grant of authority. The language of 35 U.S.C. §133 and 37 C.F.R. §1.137(a) is clear, unambiguous, and without qualification: the delay in tendering the reply to the outstanding Office action, as well as filing the first petition seeking revival, must have been unavoidable for the reply now to be accepted on petition.⁵

Delays in responding properly raise the question whether delays are unavoidable.⁶ Where there is a question whether the delay was unavoidable, Petitioners must meet the burden of establishing that the delay was unavoidable within the meaning of 35 U.S.C. §133 and 37 C.F.R. §1.137(a).⁷

-
- (2) Returning papers;
 - (3) Precluding a party from filing a paper, or presenting or contesting an issue;
 - (4) Imposing a monetary sanction;
 - (5) Requiring a terminal disclaimer for the period of the delay; or
 - (6) Terminating the proceedings in the Patent and Trademark Office.
- (d) Any practitioner violating the provisions of this section may also be subject to disciplinary action. See § 10.23(c)(15).
[Added 50 FR 5175, Feb. 6, 1985, effective Mar. 8, 1985; para. (a) revised, 58 FR 54494, Oct. 22, 1993, effective Nov. 22, 1993; paras. (a) & (b) revised, paras. (c) & (d) added, 62 FR 53131, Oct. 10, 1997, effective Dec. 1, 1997; para. (a) revised, 69 FR 56481, Sept. 21, 2004, effective Oct. 21, 2004]

⁴ 35 U.S.C. §133 provides:
35 U.S.C. §133 Time for prosecuting application.
Upon failure of the applicant to prosecute the application within six months after any action therein, of which notice has been given or mailed to the applicant, or within such shorter time, not less than thirty days, as fixed by the Commissioner in such action, the application shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner that such delay was unavoidable.

⁵ Therefore, by example, an unavoidable delay in the payment of the Filing Fee might occur if a reply is shipped by the US Postal Service, but due to catastrophic accident, the delivery is not made.

⁶ See: *Changes to Patent Practice and Procedure; Final Rule Notice*, 62 Fed. Reg. at 53158-59 (October 10, 1997), 1203 Off. Gaz. Pat. Office at 86-87 (October 21, 1997).

⁷ See: In re Application of G, 11 USPQ2d 1378, 1380 (Comm'r Pats. 1989).

And the Petitioner must be diligent in attending to the matter.⁸ Failure to do so does not constitute the care required under Pratt, and so cannot satisfy the test for diligence and due care.

(By contrast, unintentional delays are those that do not satisfy the very strict statutory and regulatory requirements of unavoidable delay, and also, by definition, are not intentional.⁹))

Allegations as to
Unintentional Delay

The requirements for relief under the provisions of 37 C.F.R. §1.137(b) are: petition, fee, reply, statement/showing of unintentional delay, and—where appropriate—a terminal disclaimer and fee

It appears that Petitioner has not satisfied the “reply” and “statement/showing” requirements of the regulation.

CONCLUSION

The petition as considered under 37 C.F.R. §1.137(b) is dismissed.

Further correspondence with respect to this matter should be addressed as follows:¹⁰

By mail: Commissioner for Patents¹¹
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX: IFW Formal Filings
(571) 273-8300
ATTN.: Office of Petitions

⁸ See: Diligence in Filing Petitions to Revive and Petitions to Withdraw the Holding of Abandonment, 1124 Off. Gaz. Pat. Office 33 (March 19, 1991). It was and is Petitioner's burden to exercise diligence in seeking either to have the holding of abandonment withdrawn or the application revived. See 1124 Off. Gaz. Pat. Office *supra*.

⁹ Therefore, by example, an unintentional delay in the reply might occur if the reply and transmittal form are to be prepared for shipment by the US Postal Service, but other pressing matters distract one's attention and the mail is not timely deposited for shipment.

¹⁰ On July 15, 2005, the Central Facsimile (FAX) Number changed to (571) 273-8300. The number (571) 273-8300 is the only facsimile number recognized for centralized delivery. (For further information, see: <http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/cfax062005.pdf>.)

¹¹ To determine the appropriate addresses for other subject-specific correspondence, refer to the USPTO Web site at www.uspto.gov.

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By hand: Mail Stop: Petition
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Telephone inquiries concerning this decision may be directed to the undersigned at (571) 272-3214.



John J. Gillon, Jr.
Senior Attorney
Office of Petitions

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